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NEW YORK
WORLD OF THE FUTURE

NELSON'S
World Gazetteer
AND
GEOGRAPHICAL DICTIONARY

WITH
MAP SUPPLEMENT BY BARTHOLOMEW

GENERAL EDITOR
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PREFACE

22-8-32
THERE is more need to-day than ever before for a handy, comprehensive, and reliable Gazetteer of the World. The extraordinary changes in the means of communication, not only by sea and land but also by air and ether, have so reduced the effect of distance that the whole world lies open to our view. Almost every day, therefore, the question arises in the home, the office, and the classrooms of our schools, "Where is that place?" The further questions are hardly less insistent, "What sort of a place is it?" and "How should its name be pronounced?"

The present volume has been compiled with the aim of providing answers to these and similar questions. The following are some of its chief features:

40-3-6-e
Comprehensiveness.—This Gazetteer and Geographical Dictionary contains over 10,000 entries. Its aim has been to include the name of every place in the world that is likely to be met with in the course of general reading or study, and about which any fact of geographical, historical, or other importance is known. In the interests of space, it is obvious that in the larger units only the most outstanding facts could be given. The work is intended as a book of reference for the general reader and for pupils in senior and advanced classes, and not for the specialist.

Reliability.—Care has been taken to base the facts and figures upon the latest available official or other authoritative sources of information. The populations given are those of the latest published Census figures—in the case of Great Britain, those of 1931.

Spelling of Names.—The published lists of the Royal Geographical Society have been taken as a guide in this matter, but in the main only so far as the sounds can be represented by the ordinary English alphabet. Special

PREFACE

characters such as those adopted in certain countries of Central and Eastern Europe are of service to the specialist but not to the ordinary English reader.

Pronunciation.—In every case guidance to the pronunciation sufficient for the ordinary reader has been given. Where it has seemed necessary the name has been re-written, so that by reference to the "Key to Pronunciation," on page vii, at least an approximation to the sound is easily obtained.

Special English Forms.—Where custom has sanctioned a special English form or pronunciation for a foreign name, this is adhered to though differing from that used in the foreign country, as, for example, the spelling of Naples, Brussels, Florence, etc., and the pronunciation of Paris, Trafalgar, etc. The function of any such book is not to prescribe what the form or pronunciation ought to be, but to record what is commonly accepted among English-speaking people. In all cases where it has seemed desirable, however, the foreign as well as the accepted English usage is given.

The Geographical Dictionary.—The Dictionary of Geographical Terms gives in handy form an explanation of the terms most commonly used in Physical Geography, Meteorology, World Commerce, and other allied topics. This will be found of service not only in the school classroom but also by the general reader, and is a distinct novelty in works of this character.

The Publishers claim that no Gazetteer has ever before been produced which contains so much information in so compact and handy a form. Every care has been taken to ensure that the information is trustworthy and up-to-date, and it is hoped that the book will be found equally valuable in the School, the Office, and the Home.

The task of compiling and editing so comprehensive a work required the services of highly qualified experts, and the staff employed included Messrs. G. S. Dickson, M.A., B.Sc., J. Hamilton Birrell, M.A., Ph.D., F.R.S.G.S., A. P. Gray, M.A., F.R.S.G.S., W. Carnon, M.A., and others, together with the General Editor.

KEY TO PRONUNCIATION

- ä* as in mar (*mär*), psalm (*säm*), hurrah (*hurä*).
a, ä „ cat (*cät*), battle (*bät*), abbot (*äb'ot*).
ä „ mate (*mät*), pain (*pän*), weight (*wät*).
au, aw as in call (*caw*), appal (*apaw*'), brought (*braw*).
e as in sell (*säl*), ferry (*fer'i*).
ē „ her (*hēr*), fur (*fēr*), gird (*gērd*).
ē „ meet (*mēt*), leaf (*lēf*), mere (*mēr*).
i, ī „ knit (*nīt*), silly (*sil'i*), busy (*biz'i*).
ī, y „ white (*whīt*), arise (*aris'*), might (*mīt*).
o „ pot (*pöt*), watch (*woch*), lorry (*lor'i*).
ō „ grow (*grō*), know (*nō*), loaf (*lōf*).
ō „ lord (*lōrd*), resort (*rezōrt*).
oo „ room (*room*), ginc (*glōo*), shoe (*shōo*).
u „ full (*ful*), book (*buk*), could (*cuđ*).
ū „ shun (*shūn*), mud (*mūd*), above (*abūv*).
ū „ mute (*mūt*), few (*fū*), pure (*pūr*).
ou, ow as in doubt (*dout*), knout (*nout*), aloud (*aloud*).
oi as in coin (*koīn*), buoy (*boi*), royal (*roi'al*).
ch „ chime (*chīm*), catch (*käch*).
ch „ loch (*loch*), pibroch (*pē'broch*).
g „ good (*guđ*), linger (*līng'ger*).
j „ jam (*jām*), gem (*jēm*), judge (*jāf*).
n (nasal) as in entente (*āntānt'*), savant (*sāvān*).
sh as in shove (*shūv*), tension (*ten'shon*), action (*āk'shon*).
zh „ leisure (*lez'hār*), vision (*vīzh'on*).
th „ think (*think*), theme (*thēm*), health (*helth*).
th „ thine (*thīn*), wreath (*rēth*), though (*thō*).
wh „ while (*whīl*), somewhere (*sūm'whār*).

When the accent is placed immediately after a vowel, that vowel is long; when the accent is placed after a consonant, the vowel of that syllable is short, as

ca'ble	cab'in	o'ral	or'ange
se'cret	sec'ond	pu'ny	pun'ish
pi'lot	pil'lar	ty'rant	tyr'anny

ABBREVIATIONS

ac.	acres.	N., n.	north, northern.
alt.	altitude.	par.	parish.
anc.	ancient.	parl.	parliamentary.
bor.	borough.	pop.	population.
Brit.	British.	prod.	products.
c.	about (<i>circiter</i>).	prov.	province.
cap.	capital.	R., riv.	river.
cent.	century.	r. bk.	right bank.
co.	county.	rep.	republic.
comm.	commune.	rly. (jn.)	railway (junction).
dep.	department.	R.S.F.S.R.	Russian Socialist Federal Soviet Republic.
dist.	district.	S., s.	south, southern.
div.	division.	sq. m.	square miles.
E., e.	east, eastern.	str.	strait.
eccles.	ecclesiastical.	terr.	territory.
episc.	episcopal.	tn.	town.
est.	estimated.	trib.	tributary.
exp.	exports.	U.K.	United Kingdom.
Fr.	French.	univ.	university.
ft.	feet.	urb. dist.	urban district.
govt.	government.	U.S.A.	United States of America.
I., isl.	island.	U.S.S.R.	Union of Socialist Soviet Republics.
I.F.S.	Irish Free State.	vil.	village.
in.	inches.	W., w.	west, western.
L.	Lake.	wat.-pl.	watering-place.
l. bk.	left bank.	yds.	yards.
m.	miles.		
mkt.	market.		
Mt., mts.	mount, mountains.		
munic.	municipal.		

WORLD GAZETTEER

A

Anbenras (*ôb'en-rô*), formerly **APENRADE**, port and wat.-pl., Sleswick, Denmark, 30 m. N. of Flensburg; trades in grain, fodder, and timber; fishing. Pop. 8,000.

Aachen (*â'chen*), or **AIX-LA-CHAPELLE**, tn., Prussia, Germany, 44 m. W.S.W. of Cologne; Charlemagne's cap. and burial-place; coal and iron fields, hardware and textile manufactures; sulphur baths. Pop. 156,000.

Aalborg (*âl'borg*), port, Liim Fjord, Denmark; shipbuilding yards. Exports: fish, grain. Pop. 43,000.

Aalesund (*â'le-soond*), port, Norway, 160 m. N. of Bergen by sea; cod and herring fisheries; burned down (1904), but since rebuilt. Pop. 18,000.

Aalst. See **ALOST**.

Aar or **Aare** (*âr*), largest Swiss riv.; flows through Bern and joins Rhine near Waldshut; 181 m. long; area of basin, 6,800 sq. m.

Aarau (*â'rau*), cap. of Aargau, Switzerland. Products: silk, cotton, tiles, cement, scientific instruments. Pop. 12,000.

Aargau (*âr'gau*), N. Swiss canton; agriculture, cattle, wine, fruit, salt mining. Cap. Aarau. Area, 548 sq. m.; pop. 247,000.

Aarhus (*âr'hoos*), port, Denmark, on E. coast; good harbour; tobacco, silk, cotton, distilleries. Pop. 76,000.

Abaco, GREAT, one of Bahama Islands; E. of Great Bahama; light-house. Pop. 4,000.

(3,601)

Abadan', isl., delta of Shatt-al-Arab, Persia, 10 m. below Mohammerah; has large refinery of the Anglo-Persian Oil Co.; tn. (pop. 30,000) rapidly extending.

Ab'ana, or **AMANAH** (modern **BARADA**), riv. flowing from Anti-Lebanon Mts. through Damascus; loses itself in marshy lakes.

Abbazia (*â-bat-s'za*), tn., Italy, at head of Gulf of Fiume; popular health resort. Pop. 2,500.

Abbeville (*âb'vêl*), tn., on R. Somme, N. France; woollens, linens, hemp goods, sugar; has old churches; Brit. base in Great War. Pop. 20,000.

Abbeyfeale (*âb-be-fêl'*), mkt. tn., S.W. Limerick, I.F.S.; ruins of stronghold of Geraldines. Pop. 1,000.

Abbeyleix (*âb-e-lêx'*), mkt. tn., Leix, I.F.S.; famous Brigidine convent (1840); oat mills. Pop. 760.

Ab'bots Brom'ley, par. and mkt. tn., Staffs, England, 10 m. E. of Stafford; Norman church of St. Nicholas (restored 1855). Pop. 1,500.

Ab'botstford, on R. Tweed, Roxburghshire, Scotland, 3 m. W. of Melrose; home of Sir Walter Scott from 1812 to 1832.

Ab'bots Lang'ley, par. and vil., S.W. Herts, England; reputed birthplace of Pope Adrian IV. Pop. 4,200.

Abbottabad', hill station, N.W. Frontier Province, India, 100 m. W. of Srinagar; alt. 4,200 ft.; military cantonment; on one of main roads to Kashmir. Pop. 11,500.

Abeokuta, tn., s. Nigeria, W. Africa; palm oil, timber, yams, shea-butter. Pop. 38,000.

Aberavon, now part of Port Talbot, Glamorganshire, Wales; tin works. Pop. 15,000.

Aberayron or **Aberavon**, wat.-pl., Cardigan Bay, Cardiganshire, Wales; fishing, coasting trade, flour and saw mills. Pop. 1,200.

Ab'ercarn, urb. dist., Monmouthshire, England, 10 m. n.w. of Newport; coal, iron. Pop. 20,600.

Ab'ercorn, trading station, N. Rhodesia, 15 m. s. of L. Tanganyika; alt. 6,000 ft.

Abercynon (*ab-er-koo'non*), dist., Glamorganshire, Wales, in Mountain Ash urb. dist.; coal, iron.

Aberdare, tn., Glamorganshire, Wales, 4 m. s.w. of Merthyr Tydfil; exports coal; tin industries. Pop. 48,800.

Aberdar' on, par. and vil., Carnarvonshire, Wales, 28 m. s.w. of Carnarvon; Norman church and tumulus. Pop. (par.) 1,700.

Aberdeen. (1) Port, royal burgh, and co. tn., Aberdeenshire, Scotland, on Rs. Dee and Don. Tn. built mainly of grey granite (the 'Granite City'); consists of Old and New Aberdeen. Great educational centre. Four bridges over Dee. Principal n. seaport of Scotland, chiefly coasting trade; deep-sea fisheries, centre of trawling. Industries include quarrying and polishing granite, textile, paper, comb, jute, jam manufactures; flax spinning, brewing, distilling. Pop. 167,300.

(2) Tn., Cape Prov., S. Africa, 140 m. n.w. of Port Elizabeth; alt. 2,850 ft.; stock fairs monthly. Pop. (white) 2,600. (3) City, S. Dakota, U.S.A., 118 m. n.e. of Pierre; artesian wells; chemicals, foundry products. Pop. 15,000. (4) Port, Washington, U.S.A., at head of Gray's Harbour; lumber industry; salmon cannery. Pop. 22,000.

Aberdeenshire, maritime co., n.e. Scotland; has five dists.—Mar, Formartine, Buchan, Garrioch, Strathbogie; among chief peaks of Gram-

pians are Ben Macdhui, Cairntoul, Lochnagar; chief rivs., Dee and Don, noted for salmon; largest lake, Loch Muick; geological formation is mainly crystalline schists; climate mild; grouse, partridges, red deer abundant; has ash, fir, larch trees. Principal industry agriculture; many small holdings; oats, barley, turnips grown; shorthorn and polled Angus cattle bred. Very productive coast fisheries. Other industries: granite quarrying, brick making, brewing, distilling, paper and wool making. Chief tns., Aberdeen, Peterhead, Fraserburgh, Huntly. Area, 1,980 sq. m.; pop. 300,400.

Aberdour, seaside resort, Fife, Scotland, on Firth of Forth. Inchcolm is close by. Pop. 3,000.

Aberdorey, wat.-pl., Merionethshire, Wales, on estuary of R. Dovey.

Aberfeldy, vil., Perthshire, Scotland, on R. Tay. Black Watch embodied here (1739). Pop. 1,500.

Aberfoyle, vil. and pass, Perthshire, Scotland, 34 m. n. of Glasgow. Associated with Scott's *Rob Roy*. Pop. of par. 1,200.

Abergavenny (*ab-er-gav-en'i* or *ab-er-gen'i*), tn., Monmouthshire, England, 20 m. n. of Newport. Ironworks. Pop. 8,600.

Abergele (*ab-er-gē'le*), wat.-pl., Denbighshire, Wales. Pop. 2,700.

Aberlour, or CHARLESTOWN OF ABERLOUR, police burgh, Banffshire, Scotland, on R. Spey, 2½ m. s.w. of Craigellachie; distilleries; orphanage. Pop. 1,200.

Abernethy. (1) Vil., Perthshire, Scotland, 8½ m. s.e. of Perth; anc. Pictish cap.; round tower. Pop. 600. (2) Par., Speyside, Inverness-shire, containing Nethybridge; favourite holiday resort.

Aberysthwy (*ab-er-sooch'an*), tn., Monmouthshire, England, 2½ m. n.n.w. of Pontypool; coal and iron dist.; manufactures sheet steel and tin plates. Pop. 25,600.

Abertillery (*ab-er-til-ā'ri*), tn., Monmouthshire, England, in s.w. coal dist. Pop. 31,800.

Aberystwith (*ab-er-ist'with*), munic. bor., wat.-pl., and univ. tn., Cardiganshire, Wales, on Cardigan Bay; has National Library of Wales (1911). Pop. 9,500.

Abeshir, cap. of Wadai dist., Chad Colony, Fr. Equatorial Africa; caravan centre. Pop. c. 25,000.

Ab'ingdon, munic. bor. and anc. tn., Berks, England, at junction of R. Thames and Ock. Agricultural trade; clothing and carpets. Pop. 7,200.

Abitibi, lake, Canada; forms boundary between Ontario and Quebec; drained by R. Abitibi (200 m.), trib. of R. Moose. Gold found in dist.

Abkhas'ia, Soviet rep., Transcaucasia, U.S.S.R., on Black Sea; cattle, maize, fruit. Pop. 200,000.

Abo (*ô'bo*). See **TURKU**.

Abo, tn., Nigeria, Africa, near mouth of R. Niger; exports palm oil.

Abomey (*ab-ô-mâ'*), tn., Dahomey, Fr. W. Africa; formerly slave market. Pop. c. 20,000.

Abor Hills, dist., border of Assam, India; traversed by R. Brahmaputra; inhabited by wild Mongolian Abors.

Aboyne (*a-boin'*), or **CHARLESTOWN** OF **ABOYNE**, vil., Aberdeenshire, Scotland, on R. Dee, 10½ m. e. of Ballater; holiday resort. Pop. 900.

Abraham, PLAINS (or **HEIGHTS**) OF, s.w. of Quebec, Canada, above St. Lawrence R.; here Wolfe defeated Montcalm (1759).

A'bram, urb. dist., Lanes, England, 2 m. s.e. of Wigan; coal mining; engineering; cotton manufacture. Pop. 6,700.

Abran'tes, tn., Estremadura, Portugal, on R. Tagus; wine, fruit, grain, olive oil. Pop. 10,000.

Abruzzi and Molise (*âbrook'sê; molé'sâ*), territorial div., central Italy, embraces Aquila, Chieti, Teramo, and Campobasso provs.; cereals, wine. Pop. 1,480,700.

Abu, MOUNT, hill station (alt. 5,650 ft.), Aravalli range, Rajputana, India. Has Jain temples.

Abu Kle'a, WELLS OF, tn., Anglo-Egyptian Sudan, Africa, 90 m. s. of

Khartoum; British defeated Arabs here (1885).

Abu Qir, formerly **Abou'kir**, small tn. and bay, Egypt; Nelson destroyed Fr. fleet in bay (1798).

Aburi (*ab-oo'ri*), tn., Gold Coast, W. Africa, 25 m. n. of Accra; govt. sanatorium; botanical station; alt. 1,540 ft.

Abu-Simbel, or **IPSAMBUL**, site of anc. temples, Egypt, on l. b. of R. Nile, c. 40 m. n.e. of Halfa; temples cut out of solid rock, with four colossal figures of Rameses, 65 ft. high.

Abyssin'ia, inland empire, N.E. Africa, surrounded by Brit., Fr., and Ital. terrs.; includes provs. of Tigré, Amhara, Gojam, Shoa, and Harar. It is a high plateau (average alt. 8,000 ft.) falling abruptly towards Red Sea, more gradually towards Nile. In n.w. the Simen Mts. of steep and bare rock, reach 15,000 ft. Chief rivers: Blue Nile, which flows through Lake Tana, and Atbara. Rivers have cut deep gorges in carrying fertilizing mud to Egypt. Lowlands up to 5,500 ft. (known as Kolla) have a tropical climate, but the Voina Dega, between 5,500 and c. 8,000 ft., with a subtropical climate and excellent pastures, is chief seat of pop. Above this region the Dega has horses and long-wooled sheep. Rainy season, June to Sept.

Abyssinia is rich in minerals, but only a little gold is exported to India. Other exports are hides and skins, ivory, coffee, civet, native butter, and wax; the chief imports are cottons (Amer., Brit., and Ind.), woollen fabrics, cutlery and hardware, Ital. and Swedish matches. There are practically no roads; goods carried mainly on pack animals. A railway runs from Jibuti to Addis Ababa.

The Abyssinians are deep brown in colour, well-formed and handsome, intelligent and fond of gaiety. They eat and drink heavily. Marriage is easily dissoluble and polygamy common. Abyssinian houses are rough circular stone huts, thatched with grass. Christianity was introduced in

the 4th cent. by Frumentius, and the Abuna or head bishop is still appointed by the Coptic Patriarch of Alexandria, and in ritual, etc., Abyssinian Christianity resembles Coptic. Education of the people has only begun; there are two schools at Addis Ababa. Upon the old feudal government is now grafted some imitation of European civilization. Chief tns.: Addis Ababa (cap.), Direddawa, Harar. Area, 350,000 sq. m.; pop. c. 10,000,000.

Aca'dia (French *Acadie*), name first applied to all Fr. possessions s. of R. St. Lawrence; later to New Brunswick, Nova Scotia, and part of Maine. Cap. Port Royal (Annapolis).

Acajutla (*ak-a-hoot'la*), Pacific port, Salvador, Central America; exports coffee.

Acapul'co, Pacific port, Mexico; sheltered harbour. Pop. c. 6,000.

Acarna'nia, region, anc. Greece; now joined with *Ætolia*; chief tn., Missolonghi. Pop. 220,000.

Accra (*ak-rā*), port and cap., Gold Coast, W. Africa. Exports cocoa, rubber, ivory; railway to interior. Pop. 38,000.

Ac'crington, tn., Lancs, England, 20 m. n. of Manchester; cotton and dye works; textile machinery. Pop. 43,000.

Achæa (*ak-ā'ya*), with Elis, prov., Greece; chief currant-producing dist. of Greece, the ports being Patras (cap.) and *Ægion*. Area, 2,000 sq. m.; pop. 321,000.

Achelo'us (modern *Aspropotamo*), famous riv. of anc. Greece, rising in Mt. Pindus; enters Ionian Sea. Its deposits have built up the Echinades Is. at its mouth.

Achensee (*āch-en-zā'*), or L. **ACHEN**, finest lake in N. Tyrol, Austria, source of Achen riv.; alt. 3,000 ft.; area, 2½ sq. m. The Pertisau, a famous pleasure resort, is on the s.w. bank.

Achill (or **EAGLE**) **Island** (*āk'il*), isl., Mayo, w. coast of Ireland, three vils. on isl.; fishing. Pop. 5,300.

Achin', or **ARJEH**, dist., N. Sumatra. Interior mountainous. Important trading centre from 17th cent.; ex-

ports pepper, copra, palm oil. Cap. Kota Raja. Area, 20,544 sq. m.; pop. 750,000.

Achin'sk. (1) Prov., Siberian Area, U.S.S.R.; forests; rye and wheat. Pop. 392,000. (2) Mkt. tn. in above, on Abakan R. and Trans-Siberian Rly.; gold found near. Pop. 7,000.

Achray', Loch, s.w. Perthshire, Scotland, at entrance to Trossachs; 1½ m. by ½ m.

Acireale (*ā-chē-rā-ā'lā*), tn., Catania, Sicily; thermal springs. Pop. 35,000.

Ack'worth, par. containing High and Low Ackworth, W. Riding of Yorks, England, 3 m. s. of Pontefract; quarrying. Pop. 4,800.

Aconcagua (*ā-kon-hā'gwa*), (1) Mountainous prov., Chile. Produces alfalfa and Mediterranean fruits. Cap. Valparaiso. Area, 7,279 sq. m.; pop. 450,000. (2) Extinct volcano in S. Andes; highest peak of New World (22,868 ft.).

Aequi (*ā'kwē*), cathedral tn., Piedmont, Italy, 28 m. n.w. of Genoa; warm sulphur springs. Pop. 16,000.

A'cre, port, N. Palestine; taken by Crusaders and retaken by Saracens in Crusades; unsuccessfully besieged by Napoleon (1799). Trade has passed to Beirut and Haifa. Pop. 6,500.

Ac'tium, promontory, Gulf of Arta, w. Greece. Octavian defeated Mark Antony here, 31 B.C., gaining control of Roman Empire.

Ac'ton, tn., Middlesex, England; w. suburb of London. Pop. 70,500.

Ada (*ad'o*), tn., Yugoslavia, on R. Tisa; steamer port; cattle market. Pop. 12,000.

Adabazar', tn., Asia Minor, Turkey, 75 m. E. of Scutari; linen and silk; trade centre. Pop. 83,500.

Adal'ia, or **ANTALIA**, port, S. Asia Minor, Turkey, at head of Gulf of Adalia. Exports timber, grain, cattle, horses; has coast trade; trade decreased after extension of Anatolian rys. Pop. 39,000.

Adamā'wa, fertile country, w. Africa, midway between Bight of Biafra and L. Chad; cotton, ground-

nuts, ivory; divided between Britain and France.

Adams. (1) Tn., n.w. Massachusetts, U.S.A.; paper, cotton, woollens, silk. Pop. 14,000. (2) Mt., Cascade Range, Washington, U.S.A.; alt. 12,470 ft.

Adam's Bridge, ridge of sand and coral reef off n.w. Ceylon; length 30 m.; railway proposed between Ceylon and India.

Adam's Peak, mt., Ceylon (7,352 ft.); consists of granite; foot-like depression on summit ascribed by Mohammedans to Adam and by Buddhists to Buddha.

Adana (*â-dâ-na*). (1) Vilayet, s.e. Asia Minor, Turkey; unexploited minerals; cereals, cotton, wool, fruits. Area, 15,400 sq. m.; pop. 228,000. (2) Chief tn. of above, on Seihan riv.; railway centre. Pop. 73,000.

Ad'â, riv., Italy; flows through L. Como to R. Po; 150 m.

Addis Ababa (*â-dis â-bâ-bâ*), cap., Abyssinia, in Shoa prov.; terminus of rly. from Jibuti. Founded in 1892, and has merely local industries. Pop. (fluctuating according to troops quartered in town) c. 70,000.

Ad'dlestone, vil., Surrey, England, 1½ m. s.e. of Chertsey; site of new model village and park (war memorial). Pop. 7,800.

Ad'elaide, cap., S. Australia, on Gulf of St. Vincent. Founded in 1836. Has univ., government house, two cathedrals. Exports wheat, wine, wool, fruit, silver, copper. Pop. (with suburbs) 317,000.

Adelboden, health resort, Bernese Oberland, Switzerland, 19 m. s.w. of Interlaken; alt. 4,600 ft.; mineral springs.

Ad'elsberg. See POSTUMIA GROTTE.

A'den. (1) Brit. possession and fortified port, s.w. Arabia. Tn. in volcanic crater; important coaling, cable, and transshipment station. Imports coffee, cottons, grain, hides, coal, sugar, tobacco; Brit. since 1839; hinterland protectorate, 9,000 sq. m.; under the govt. of Bombay. Pop. (including Perim) 55,000. (2) GULF

of, between s. Arabia and Somaliland (500 m. by c. 170 m.).

Ader'no, tn., Sicily, Italy, at base of Mt. Etna, 22 m. by rail n.w. of Catania; Norman tower. Pop. 40,000.

Adige (*â-dê-jâ*), second most important riv. of Italy, rises in Rhaetian Alps and enters Adriatic Sea, n. of mouth of R. Po. Length, 240 m. Chief avenue from Ital. plain through Trentino to Brenner Pass and Innsbruck.

Adiron'dacks, mt. group, n.e. New York, U.S.A. Many isolated peaks, loftiest Mt. Marcy (5,344 ft.); region contains L. Champlain and L. George; heavily forested; holiday resort. Adirondack Park includes a forest reserve (c. 2,000,000 ac.).

Ad'lington, urb. dist., N. Lancs, England, 6 m. n.e. of Wigan. Cotton spinning, calico printing, and bleaching. Pop. 4,200.

Admiralty Gulf, large inlet, Kimberley div., n.w. of W. Australia, with many islands. Port Warrender stands at its head.

Admiralty Island, isl., Alexander Archipelago, between Chichakov and Baranov Islands and mainland of Alaska; densely forested; coal and copper mines. Belongs to U.S.A.

Admiralty Islands, group of forty islands to n.e. of New Guinea. Largest, Manus. Coconuts; pearl fisheries. Included in Australian mandate of New Guinea. Pop. (Papuan) 13,800.

Ado'ni, tn., Madras, India, 64 m. n.e. of Bellary; one of chief cotton markets of Deccan. Pop. 30,500.

Adour (*â-door*), riv., France; rises in Pic du Midi de Bigorre, Pyrenees; drains n.w. slopes of Pyrenees to Bay of Biscay, 4 m. below Bayonne; length, 207 m.

Ad'ra, port, Almeria, s. Spain; exports lead, grapes, wine, esparto. Pop. 9,000.

Adramyti (*â-drâ-mê'tê*), tn., vilayet Brussa, Asia Minor, Turkey; on trade route to Panderma; wine and olive oil.

Ad'ria, tn., prov. Rovigo, Italy, be-

tween Rs. Adige and Po; formerly on coast, now 15 m. inland. Pop. 14,000.

Adriano'ple (Turkish *Edirne*), tn., Turkey in Europe, at confluence of Rs. Tunja and Maritsa, 137 m. w.n.w. of Constantinople by rail. Important commercial centre for silk, attar of roses, opium, wine, cereals, and tobacco. Pop. 35,000.

Adriatic Sea, arm of Mediterranean Sea, between Italy and the coasts of Yugoslavia and Albania. Extreme length, 450 m.; aver. breadth, 90 m. Tides are negligible, but navigation difficult for sailing ships by reason of *bora* (N.E. wind). Chief industry fishing, also sponge fishing. Chief ports, Brindisi, Ancona, and Venice; Trieste, Pola, and Fiume; Valona, Bar, Split, and Zara.

Ad'owa, formerly Adowa, tn., Tigre prov., Abyssinia, 145 m. N.E. of Gondar. Scene of defeat of Ital. army (March 1896). Pop. c. 5,000.

Adwick-le-Street (*ad'dik*), urb. dist., W. Riding, Yorks, England, 4 m. N.W. of Doncaster; 1 m. E. of (Roman) Ermine Street; collieries. Pop. 20,300.

Adshar'ia, rep., Transcaucasia, U.S.S.R., on Black Sea; forests; grain, wheat, fruits, cotton, silk, tobacco. Chief tn., Batumi. Area, 530 sq. m.; pop. 130,000.

Aegean Sea, part of Mediterranean Sea between Greece (W.) and Asia Minor (E.), connected with Sea of Marmora by Dardanelles. Studded with islands, including the groups of the Cyclades (Greek) and Sporades (Italian); in N. Imbros and Tenedos are Turkish. All have fine climate and scenery.

Agi'na, isl., Greece, 20 m. S. of the Piræus; many antiquities; sponge fisheries. Chief tn., Aegina.

Aeolian Islands. See LIPARI ISLANDS.

Æto'lia, dist., N. Greece. Central plain agricultural; N. and E. mountainous (Kiona, 8,240 ft.); Ætolia, with Acarnania, forms dep. of modern Greece.

Afghanistan', country, S.W. Asia.

Length from Herat frontier to Khaibar Pass, c. 600 m.; greatest breadth from N.E. to S.W., c. 700 m.; bounded on W. by Persia, N. by Turkmen, Uzbek, and Tadzhik reps., U.S.S.R., E. by tribes under Brit. influence and India, S. by Baluchistan. Main features are sand, rocks, hills, snow-topped mts.; surface rugged, much of it consisting of offshoots from Hindu Kush and other ranges to Sulaiman Mts.; plateaus between vary from 4,000 to 7,000 ft.; temp. depends on elevation; climate in higher districts very hot in summer, very severe in winter; rainfall slight. North drained by Oxus and tribs.; N.W. by Murghab and Hari-Rud; S. and S.W. by Helmand; E. by Kabul and Gomal. Fauna includes leopards, jackals, tigers, bears, gazelles. Valleys fertile; irrigation used; two harvests every year, yielding cereals, vegetables, and abundant fruit; castor-oil plant, madder, and asafetida abound. Mineral resources await development. Fat-tailed sheep is most important animal; horses, camels, and goats reared. Chief industries are manufactures of silk, felt, carpets, woollen cloth, sheepskin coats, camel and goat hair fabrics. Exports: silk carpets, madder, gums, fruit and vegetables, grain, drugs, cattle, hides, tobacco. Imports: cotton goods, dyes, sugar, hardware, leather. Large transit trade from Persia, Bokhara, Turkestan, India, to Herat and Kabul; transport is by horses and camels; no good roads except Brit. military roads; no railways; no navigable rivers, but timber floated down-stream. Pop. Afghans, Tajiks, Hazaras, Chahar-Aimals, Uzbeks; languages, Persian and Pushtu, the former being the court language; religion, Islam; education still in elementary state; Government is a constitutional monarchy with legislative and state assemblies, and a cabinet over which the king presides. Country is politically divided into five provs., Kabul, Afghan Turkistan, Herat, Kandahar, and Kataghan-Badakhshan, each under a governor. Chief

towns: Kabul, Kandahar, Herat. Area, c. 250,000 sq. m.; pop. c. 8,000,000, of whom c. 2,200,000 are Afghans (Durani and Ghilzais).

Afyon Qarahisar (*ā-fē-on' kâ-râ-hi-sâr*), tn., Brusa, Asia Minor, Turkey: opium. Pop. 20,000.

Africa, second largest continent of Old World, extends s. from Mediterranean Sea, and is almost bisected by equator; greatest length, c. 5,000 m.; greatest breadth, c. 4,500 m.; area, c. 11,500,000 sq. m. Africa approaches Europe at Strait of Gibraltar in n.w., and touches Asia at Isthmus of Suez in n.e. Off s.e. coast is large isl. Madagascar; Canaries off n.w. coast; coast-line singularly unbroken, length about 16,000 m.; principal inlets, Gulfs of Cabes and Sidra on n., Gulf of Guinea with Bights of Benin and Biafra on w. Land rises rapidly from coast; from fairly continuous outer rim of mountains greater part of surface spreads inwards in two tablelands, of which the southern has mean elevation of over 3,500 ft. and slopes down to northern, which has mean height of c. 1,300 ft.; latter in some parts falls still lower, part of n.e. Sahara being below sea-level. Higher plateau has number of ridges, and in equatorial regions are many craters of extinct volcanoes, such as Kilimanjaro (20,000 ft.) and Mt. Kenya (18,500). Chief mt. ranges near coast are Atlas on n. and Drakensberg on s.e. Along e. part of plateau are many large lakes: Rudolf, Albert, Albert Edward, Victoria, Tanganyika, Mweru, Bangweulu, Nyasa. n.e. is drained by Nile and tribs., s.w. by Zambezi, Shire, Limpopo, etc.; principal w. coast rivers, Senegal, Gambia, Volta, Niger, Ogowe, Congo, Cuanza, Cunene, Orange.

Rainfall is slight except near equator and parts of coast; rainiest region, w. of Cameroon Mts.; interior exposed to dry winds, known variously as *sirocco*, *kamsin*, *harmattan*; tropical dists. unhealthy. Typical flora: date palm in Sahara; mangrove on coast; rubber trees; many orchids,

and in s. heaths. Fauna includes the lion, leopard, panther, jackal, hyena, elephant, rhinoceros, hippopotamus, zebra, camel, buffalo, giraffe, antelope, baboon, gorilla, crocodile, python, ostrich, secretary bird, locust, and tsetse fly, many of which are peculiar to Africa.

Geologically, Africa is old, and its stability is disturbed neither by great earthquakes nor by volcanic eruptions. Slight earthquakes at times disturb the comparatively new Atlas regions, and volcanic eruptions the coast lands round the Bight of Biafra, and an eastern belt from Kilimanjaro to the Red Sea.

Political Divisions.—Within Brit. Empire are, in E. Africa, Somaliland, Anglo-Egyptian Sudan, Uganda, Kenya, Zanzibar, Nyasaland, and mandated Tanganyika Terr.; in W. Africa, Gambia, Sierra Leone, Gold Coast, Nigeria, and mandated Togoland and Cameroons; in S. Africa, Union of S. Africa, with mandated S.W. Africa, Basutoland, Bechuanaland, Swaziland. S. and N. Rhodesia; and islands of Ascension, St. Helena, Mauritius, Seychelles, etc.; total area, c. 4,000,000 sq. m. France has Algeria, Fr. Somaliland, Fr. Equatorial Africa, Fr. W. Africa, Madagascar, Tunisia, and Protectorate in Morocco—in all c. 4,300,000 sq. m. Belgium has Belgian Congo—930,000 sq. m. Italy has Eritrea, Tripolitania, and Cyrenaica, and Italian Somaliland—c. 680,000 sq. m. Portugal has Angola, Port. E. Africa, and Portuguese Guinea—c. 768,000 sq. m. Spain has Rio de Oro and Muni River Settlement—c. 129,000 sq. m. Abyssinia (350,000 sq. m.), Liberia (43,000 sq. m.), and Egypt (350,000 sq. m.) are independent states. Total pop. c. 180,000,000.

Peoples.—Majority of inhabitants are Negroes, of whom two main groups occur—Negroes proper in n. half and Bantus in s. of continent. Negroes proper have many different languages, while Bantus all speak Bantu dialects. Other inhabitants include Bushmen.

Eastern Hamites, Libyans, Semites, while intermingling has resulted in large number of tribes of mixed race. Bushmen are brown nomadic race of hunters, and with the Hottentots, who are said to be racially akin to them, formerly inhabited Cape of Good Hope, but were driven N. to Kalahari desert; Libyans, or Berbers, white race, occupy Algeria and Morocco; and Semites, or Arabs, are found in E. and N.E. Semito-Hamites chiefly inhabit Abyssinia. Equatorial regions from Uganda to the Gabon are inhabited by pygmy people—dark brown race of hunters concerning whom little is known. Original African stocks are generally supposed to have been Negroes and Bushmen, of whom former probably had original home near the large lakes, while latter have been put down as primeval inhabitants of S. regions. Hamites apparently spread from Horn of Africa, and enforced emigration of Negroes, whose subsequent mingling with Bushmen probably produced Hottentots. Libyans coming from N. also intermingled with Negroes, which resulted in the Fulas. A most important migration was that of Zulu tribes toward N., chief tribes being Matabele and Angoni. Madagascar was early occupied by a Malayo-Indonesian race known as Hovas, who are still chief group of its population, others being Malagasy and Negroid tribes.

Africa long remained isolated from world trade, partly because there was no way of communicating with interior of continent, but also because of unhealthy districts round coasts and inactivity of natives. Of these drawbacks the first hardly exists any longer, and second has been greatly ameliorated. Progress of civilization has led to increase of trade. Africa's chief resources are: jungle products, such as rubber, oil, timber of various kinds, gums, and nuts; fruits; cultivated plants, such as coffee, cotton, sugar, cereals, and tobacco; ivory, hides, wool, ostrich feathers, and other animal products; and minerals, such

as gold, diamonds, tin, copper, iron, antimony, phosphates, and lead. Means of communication have improved, and railways have been greatly extended. A trans-continental railway from Cape to Mediterranean is partly constructed. Telegraphic system is also well developed.

Ag'ades, tn., cap., Air (Asben), Sahara, Africa; important caravan centre. Pop. 8,000 (Tuaregs).

Agadir (*â-gâ-dër*), most southerly port, key to Morocco, N. Africa; on Atlantic Ocean; in French terr. Pop. c. 2,000.

Agaña (*ag-ân'ya*), tn., cap., Guam I., Pacific Ocean; belongs to U.S.A. Pop. 7,000.

Agen (*â-zhon*), cathedral tn., France, 84 m. S.E. of Bordeaux; trade in poultry, prunes, brandy, wine, grain. Pop. 20,000.

Aggtelek (*og'tel-ek*), vil., N. Hungary, 94 m. N.E. of Budapest; stalactite caves. Pop. 600.

Agincourt (*â-zhan-hoor*), vil., Pas de Calais, France; here Henry V. of England with small force, mostly archers, defeated French army (1415).

Agira (*â-jê'ra*), tn., Sicily, 35 m. W. of Catania; fine marble in vicinity. Pop. 24,000.

Ag'ra, chief tn., Agra dist., United Provs., India, on R. Jumna. Industries: cotton mills, flour mills, carpets. On bank of river is the exquisite Taj Mahal, a mausoleum in white marble erected (1632) by Shah Jehan for his favourite wife. Pop. 185,500.

Agram. See ZAGREB.

Agargentum. See GIRGENTI.

Aguadilla (*â-gwâi-dêl'ya*), tn., Porto Rico, 65 m. W. of San Juan. Exports sugar and coffee. Pop. 17,000.

Aguscalientes (*âg'uâs-kal-yen'tes*). (1) State, central Mexico; cereals, stock raising; textiles. Area, 2,969 m.; pop. 108,000. (2) Cap. of above, 70 m. N.W. of Leon; hot springs; alt. 6,400 ft. Pop. 48,000.

Aguilar de la Frontera (*â-gê-lâr dâ lâ fron-tâ'nâ*), tn., Andalusia, Spain, on the Cabra R., 27 m. S. of Cordoba;

wine, olives; dismantled Moorish castle. Pop. 15,000.

Agullas (*ā-gūl-las*), port, Murcia, Spain; exports esparto grass and iron ore. Pop. 17,000.

Agulhas (*ā-gool'yās*), CAPE, most southerly point, Africa; stormy; dangerous for shipping; lighthouse (1849).

Ahl'en, tn., Westphalia, Prussia, 17 m. s.s.e. of Münster; manufactures metals and enamels. Pop. 22,000.

Ahmadabad', tn., Bombay, India, n. of Gulf of Cambay; magnificent mosques; Jain temple; silk, gold, and cotton industries. Pop. 274,000.

Ahmadnagar. (1) Dist., Bombay, India; cotton, cereals, indigo. Pop. 732,000. (2) Cap. of above, 125 m. E. of Bombay; mission station; cottons, carpets, saris (women's dresses); copper and brass vessels. Pop. 50,000.

Ahwaz', tn., Khuzistan, Persia, on Karun riv.; contains part of oil-pipe line from Abadan I. to Anglo-Persian oilfields. Pop. c. 15,000.

Aidin (*i-dēn'*), tn., Asia Minor, Turkey, 60 m. s.e. of Smyrna; morocco leather, cotton, fruits; connected by rail with Smyrna (c. 70 m.). Pop. 70,000.

Aiguas-Mortes (*āg-mort'*), tn., Gard, France, at w. edge of delta of R. Rhone, 3 m. from Mediterranean Sea; formerly a fortified seaport; harbour long silted up, hence name, 'dead waters'; centre of canals; fishing. Pop. 3,400.

Aigun (*i'goon*), tn., Manchuria, on R. Amur; local trade in cattle, grain, and flour. Pop. 20,000.

Ailas Craig, precipitous islet, Firth of Clyde, Scotland; alt. 1,114 ft.; lighthouse.

Ain (*ān*). (1) Dep. of E. France; bisected by R. Ain; E. mountainous, w. flat. Hemp, vines, grain, sheep, poultry raised; cereals; stock raising; silk factories; forest industries. Cap. Bourg. Pop. 317,000. (2) Riv., France; rises Jura range; joins Rhone above Lyons.

Ain Sefra (*in sef'ra*), terr., s. Algeria; traversed by Oran Rly. Pop. 174,000.

Aintab (*in'tab*), Asia Minor, Turkey, 60 m. n. of Aleppo; bazaars; hides and morocco leather. Pop. 60,000.

Ain'tree, vil., Lancs, England, 5 m. n.e. of Liverpool; on its racecourse Grand National Steeplechase is run.

Air (*a-ēr'*), or **Assen**, Saharan dist., Niger Colony, French W. Africa; mts. rise to 5,000 ft. Caravan centre; dates, millet, indigo, and senna produced; inhabitants (Tuaregs) of mixed race. Cap. Agades.

Air'drie, mkt. tn., munic. burgh, Lanarkshire, Scotland, 11 m. E. of Glasgow; collieries, ironworks; first free library in Scotland (1856). Pop. 26,000.

Aire (*ār*), riv., W. Riding, Yorks, England; joins R. Ouse. Coal and manufacturing area.

Airedale, valley of R. Aire, Yorks, England; has ruins of Kirkstall Abbey, near Leeds.

Aisne (*ān*). (1) Riv., n. France, rises in the Argonne, dep. Meuse, and falls into R. Oise at Compiègne; connected by canals with other important rivs. of region; navigable to Condé; scene of three important battles during Great War; length, 175 m. (2) Dep., n. France; hilly in n.e.; remainder well-wooded plains and valleys. Agriculture highly developed; timber, chemicals, iron goods, sugar, brewing, textiles. Cap. Laon. Area, 2,866 sq. m.; pop. 489,000.

Aitutak'i, one of Cook Islands, S. Pacific; belongs to New Zealand; coconuts.

Aivali (*ā-ē-nā'lē*), port, Asia Minor, Turkey; opposite Mitylene I.; exports fish, wine, raisins. Pop. 17,000.

Aix (*āks*), tn., Bouches-du-Rhône, France, 18 m. n. of Marseilles; old cap. of Provence; thermal springs; olive oil, confectionery, flour. Pop. 23,500.

Aix-la-Chapelle. See AACHEN.

Aix-les-Bains (*āks-le-ban*), health resort, Savoie, France, 9 m. n. of Chambéry; near Lake Bourget; hot springs (alum and sulphur). Pop. 8,000.

Ajaccio (*ā-yāl'chō*), cap., Corsica,

France, on Gulf of Ajaccio. Birth-place of Napoleon; winter resort. Exports wood, sardines, anchovies, wine, fruit. Pop. 21,000.

Ajmer (*aj-mér'*), tn., Rajputana, India; cap. of Ajmer-Merwara; on slopes of Taragarh Hill; fortress. Mayo College for Rajput chiefs; cotton, salt, oil, opium. Pop. 114,000.

Ajmer-Merwara, prov., India; cotton, millet, wheat, oil-seeds. Chief tn., Ajmer. Area, 2,599 sq. m.; pop. 448,000.

Akaba. See AQABA.

Akss'a, tn., coaling and transhipment station, R. Nun mouth, s. Nigeria; govt. engineering and repair shops; ground nuts, palm oil. Pop. 31,000.

Ak'shi, tn. and summer resort, Honshu, Japan, 12 m. w. of Kobe; meridian regulates Japanese time. Pop. 35,000.

Akhalsikh (*ā-chāl'tsēch*), tn., Georgian rep., U.S.S.R.; silver filigree work; silk, honey, wax. Pop. 15,000.

Ak-Hissar', tn., Asia Minor, Turkey, 58 m. n.e. of Smyrna; exports carpets, cereals, opium, cotton, dyes; anc. *Thyatira*. Pop. 48,000.

Akhmin, tn., Upper Egypt, on R. Nile; manufactures cotton goods. Pop. 28,000.

Akhtyrka (*ā-chīr'hā*), tn., Ukraine rep., U.S.S.R., c. 70 m. n.w. of Kharkov; woollens, fruit, beet sugar. Pop. 30,000.

Akerman. See CETATEA ALBA.

Akmolinsk'. (1) Prov., Kazak rep., U.S.S.R.; copper and coal; nomadic Kirghiz rear sheep, cattle, horses, goats, and camels. Area, 97,600 sq. m.; pop. 288,000. (2) Tn. in above, 280 m. s.s.w. of Omsk; caravan entrepôt. Pop. 10,000.

Ako'la. (1) Dist., Berar, India; cotton, cereals. Area, 4,111 sq. m.; pop. 800,000. (2) Tn. in above, 53 m. s.w. of Amraoti; cotton centre. Pop. 38,000.

Akreyri (*ak-rī'rē*), tn., n. Iceland; chief station of Iceland herring fishery; train-oil boileries. Pop. 3,000.

Ak'ron, city, Ohio, U.S.A., 35 m. s. by e. of Cleveland; largest rubber-manufacturing centre in world; corn mills; clay beds; flour and woollens. Pop. 254,000.

Aksu', city, w. Sinkiang, China; earthenware, copper, iron, leather goods; caravan centre. Pop. 20,000.

Aksum', formerly Axum, anc. city, Tigre, n. Abyssinia; alt. 7,226 ft.; sacred city.

Ak'yah, port, Burma, on Bay of Bengal; third port of Burma; exports rice. Pop. 38,000.

Alabā'ma. (1) S. state, U.S.A.; bounded n. by Tennessee, e. by Georgia, w. by Mississippi, s. by Florida and Gulf of Mexico. Surface flat, except Appalachian Mts. in n.e.; soil of coastal plain sandy; farther n., rich black soil ('Black Prairie'), where cotton is grown. Chief rvs.: Alabama, Mobile, Tennessee; coastline short; one good harbour, Mobile Bay. Climate varied, healthy; rainfall about 60 in. Chief industry, agriculture; cotton, maize, wheat, oats, potatoes, sugar, tobacco; chief minerals, iron, coal, gold, silver, lead; much timber; manufactures iron, steel, coke, cotton goods, fertilizers, turpentine, resin. Tuskegee Institute (for Negroes). Chief tns., Montgomery (cap.), Mobile, Birmingham. Area, 51,998 sq. m.; est. pop. 2,550,000 (40 per cent. Negroes). (2) Riv., U.S.A.; joins Tombigbee, forming Mobile R.

Alago'as, Atlantic state, Brazil; sugar, cotton, tobacco, rubber; cap. Maceio. Area, 11,028 sq. m.; pop. 1,117,000.

Alai Mountains (*Alai Tagh*), lofty mts., Central Asia, s.w. extension of Tian-Shan Mts.

Alais. See ALÈS.

Alajuela (*ā-lā-chōo-āl'a*), prov. and tn., central Costa Rica; coffee, sugar. Pop. (tn.) 9,000, (prov.) 98,000.

Alame'da, tn., California, U.S.A., on San Francisco Bay; borax, potteries. Pop. 34,000.

Aland Islands (*ō'lānd*), about three hundred islands, Gulf of Bothnia; eighty inhabited; cereals, cattle.

Islands now form a dep. of Finland. Area, 551 sq. m.; pop. 27,000.

Alapaevsk, tn., Ural Area, Russia, 80 m. N.E. of Sverdlovsk; iron and copper mines. Pop. 12,000.

Ala-shan. (1) Mts., Inner Mongolia; highest peak, 11,000 ft. (2) Or **LITTLE Gobi**, sandy desert, s. Mongolia; inhabitants, Mongols and Kalmucks.

Ala-Shehr (*al-a-shā'*), anc. city, Asia Minor, 105 m. by rail E. of Smyrna; mineral springs; trades in grain, tobacco, cottons. Pop. 33,000.

Alas'ka, peninsula, N. America, terr. of U.S.A.; bounded by Arctic Ocean on N., Arctic Ocean and Bering Str. on W., Pacific on S., Canada on E.; traversed by many mt. ranges (principal peaks, Mts. McKinley and Foraker); many active volcanoes; hot springs. Coast much indented; chief isls.: Aleutian and Kodiak Isls. in S.W., Alexander Archipelago in S.E.; first and third are remains of submerged mt. ranges; principal riv. Yukon; large forests. Climate is damp and very severe; fauna includes the moose, caribou, sable, otter, seal, wolf, bear, beaver, ermine, fox, mink; flora includes balsam, fir, cedar, hemlock, spruce. Fisheries, salmon canning; furs; gold, silver, tin, copper; large coal areas. Terr. sold by Russia to U.S.A., 1867, for \$1,440,000; Alaskan-Canadian boundary dispute settled at London, 1903. Chief towns: Juneau (cap.), Ketchikan (anchorage), Sitka. Area, 590,884 sq. m.; pop. 55,000.

Alas'io, tn., Liguria, Italy; in Italian Riviera; winter resort. Pop. 6,000.

Ala-tau, mt. range, Central Asia, S.E. of L. Balkash; chief peak, Khan Tengri (24,000 ft.).

Alat'ri, tn., Italy, 45 m. S.E. of Rome; tapestry and cloth. Pop. 15,000.

Alatyr (*ā-lā-tēr'*), tn., Chuvash rep., Russia, c. 130 m. S.W. of Kazan; milling, brewing; grain trade. Pop. 22,000.

Al'ava, prov., N. Spain; viticulture;

cereals, timber, salt; cap. Vitoria. Area, 1,175 sq. m.; pop. 100,000.

Al'ba, tn., prov. Cuneo, Italy, 42 m. by rail S.E. of Turin; viticulture, sericulture. Pop. 14,000.

Albacete (*āl-bā-thā'ti*). (1) Prov., Murcia, Spain; cereals, fruit, sheep. Area, 5,737 sq. m.; pop. 315,000. (2) Cap. of above; trade in saffron and agricultural produce. Pop. 36,000.

Al'ba Inlia (*yool'yā*), formerly KARLSBURG or GYULA-FEHÉRVÁR, tn., Transylvania, Romania, on R. Mures; wine; union of Transylvania with Romania proclaimed here, 1918. Pop. 13,500.

Alba'nia, kingdom on E. shore of Adriatic Sea. Traversed by high mts.; coast plains fertile. Chief rvs.: Drin, Shkumbi, Viossa; Lakes Scutari and Okhrida on frontier. Climate extreme; fever on swampy coast lands. Wolves in all parts; game abundant; primitive cultivation; minerals undeveloped; forests of oak, beech, ash, etc.; cereals, tobacco, olives, oranges, vines, and mulberries; cattle raised; exports animal foods, fish, cereals, hides and skins.

Albanians are warlike race of highlanders. Ghegs in the N., Tosks in the S. They have retained their own language, of which Gheg and Tosk are principal dialects. Chief towns: Koritsa, Scutari, Tirana (cap.). Area (est.), 17,374 sq. m.; pop. (est.) 834,000.

Al'hany. (1) Tn., W. Australia, on King George Sound; importance declined with rise of Fremantle; whaling. Pop. 4,000. (2) Cap., New York state, U.S.A.; at head of large steamer navigation, Hudson R., and terminal point of the Erie Canal (opened 1825); formerly a fur-trading station, now a large manufacturing and distributing centre. Manufactures iron and brass goods, chemicals, textiles, paper. Pop. 127,000.

Albay. (1) Prov., S.E. Luzon, Philippines; manila hemp production; copra, sugar, rice, tobacco. Area, 997 sq. m.; pop. c. 250,000.

(2) Cap. of above; includes port of Legaspi. Pop. 53,000.

Albert. (1) (*al-ber'*) Small tn., Somme, France, on R. Ancre; suffered destruction in the Great War. (2) **LAKE**, in R. Nile basin, Uganda, Africa; 100 m. long, 20 m. wide; area, 1,640 sq. m. Receives Semliki R. from L. Edward in s.w., Victoria Nile in n.e., n. outlet, White Nile; navigable, except in s.; discovered by Sir Samuel Baker (1864).

Alberta, prov., w. Canada. Surface generally level in n. and s.e., mountainous in w. (Rockies); much of s. is prairie; chief rvs.: Peace, Athabasca, Saskatchewan; lakes: Lesser Slave, Claire, part of Athabasca; climate extreme; rainfall, 13 in. In n. are forests; s.w. is important ranching dist., with cattle, horses, and sheep; dairying. Wheat and other grains, fruits, and tobacco cultivated; 'dry farming'; alfalfa on irrigated lands; farms in Peace valley. Minerals include coal, petroleum, natural gas, asphalt, gold. Banff, in Canadian National Park, has hot springs. Chief tns., Edmonton (cap.), Calgary. Area, 255,285 sq. m.; pop. 608,000.

Albert Edward, **LAKE**. See **EDWARD, LAKE**.

Albertville. (1) Tn., Savoie, France, 50 m. n.e. of Grenoble; silver-lead mines, slate. Pop. 6,000. (2) Trading station, Belgian Congo, on w. of L. Tanganyika; rly. to Lualaba riv.

Albi, tn., Tarn, France, 48 m. n.e. of Toulouse; wheat, prunes, wines. Pop. 22,000.

Albrun Pass, Alpine bridle path (7,907 ft.), 17 m. n.e. of Simplon Tunnel; leads by Rs. Binn and Devero valleys from Switzerland into Italy.

Albuquerque (*al-bo-ker'á*), tn., New Mexico, U.S.A., on Río Grande; wool, hides, timber; irrigation centre. Pop. 27,000.

Albury, tn., New South Wales; at head of navigation of R. Murray; sheep, fruit, cereals. Pop. 8,500.

Alcamo, tn., Sicily, Italy, 24 m. s.w. of Palermo; centre of fertile dist.; Saracen castle. Pop. 63,000.

Alcaraz (*ál-ká-ráth'*), mts., Spain; at head of basin of Guadalquivir; loftiest peak, 5,900 ft.; San Juan de Alcaraz copper mines in vicinity.

Alcazar de San Juan (*ál-ká-thár' de sán choo-án'*), tn., Spain, 92 m. by rail s.s.e. of Madrid; rly. jn.; soap, gunpowder factories; wine. Pop. 16,000.

Alcester (*aul'ster*), tn., Warwickshire, England, 15 m. s.w. of Warwick; site of Roman camp; cycles; agricultural implements. Pop. 2,300.

Aleira (*ál-thé'ra*), tn., Spain, 22 m. s.w. of Valencia; silk, fruit, rice. Pop. 20,000.

Alecy (*ál-kó'e*), tn., Spain, 34 m. n. of Alicante; textiles, agricultural machinery, cigarette paper. Pop. 37,000.

Aldborough, vil., Yorks, England, 7 m. s.e. of Ripon; on Watling Street; Roman remains. Pop. 600.

Aldbrough or **Aldborough** (*auld'boru* or *aul'boru*), seapt., Suffolk, England; herring and lobster fishing; importance diminished since 17th cent. Pop. 2,500.

Al'derley Edge, urb. dist., Cheshire, England, 8 m. s.w. of Stockport; copper mines till 1879. Pop. 3,100.

Al'derney, most northerly of Channel Islands; separated from Normandy by Race of Alderney. Coast fringed with reefs—the Caskets; surface an open tableland; soil fertile, vegetable produce for early Fr. and Brit. markets grown. Alderney cattle once famous. Regular steamer communication between Alderney, Guernsey, and Cherbourg; harbour at Braye. Cap. St. Anne, near centre of isl. Area, 1,962 ac.; pop. 2,000.

Al'dershot, munic. bor., Hants, England, 35 m. s.w. of London; military camp established in 1855; permanent barracks erected in 1881. British Expeditionary Force (Aug. 1914) mobilized here. Pop. 34,300.

Alemtejo (*á-lan-tá'zhó*), largest prov., Portugal; several mt. chains; rvs., Tagus, Guadiana. Cereals; stock raising; forests; copper and iron mines. Cap. Evora. Area, 9,219 sq. m.; pop. 502,000.

Alençon (*â-lan-sôn*'), chief tn., Orne, n.w. France; woollens, linen; gave name to famous lace. Pop. 14,000.

Alep'po (Turkish *Haleb*), city, Syria, 70 m. s.e. of its port, Alexandretta; in fertile plain; important trade centre before discovery of sea route to India. Tobacco, wheat, hemp; manufactures silk and cotton stuffs. Rlys. to Damascus, Alexandretta, and Baghdad. Pop. c. 200,000.

Alas (*â-lèz*'), formerly ALAIS, tn., Gard, s. France, at base of Cévennes Mts.; silk market; coal and iron mines. Pop. 30,000.

Alessan'dria, (1) Prov., Piedmont, Italy; agricultural; silk. Area, 1,960 sq. m.; pop. 782,000. (2) Fort. tn., cap. of above, 48 m. s.e. of Turin; rly. jn.; linen, felt hats, macaroni. Pop. 85,000.

Ales'sio, port, Adriatic Sea, Albania, 17 m. s.e. of Scutari. Pop. 3,500.

Al'etsch, glacier, Switzerland, largest in Europe (12½ m. long), s. of Jungfrau.

Al'etschhorn, mt. peak, Bernese Oberland, Switzerland (13,773 ft.); first ascended 1859.

Aleutian Islands (*â-loosh'i-an*), chain of small islands, Alaska, Pacific Ocean; extend over 1,000 m. towards Kamchatka from Alaska; many are volcanic; largest, Unimak, has two volcanoes; principal industries: fishing, hunting, sealing, fox farming; Unalaska is sealing and whaling centre. Pop. 1,000.

Alexander Archipelago (over 1,100 islands), off Alaska; chief islands, Baranov, Prince of Wales; belong to U.S.A.

Alexandretta (Turkish *Iskanderun*), tn., n. Syria; port for Aleppo; exports live-stock, textiles, tobacco, silk, and fruit. Pop. 15,000.

Alexandria, (1) Port, Egypt; built on peninsula between Mediterranean and Lake Mareotis, and on isthmus joining Pharos to mainland; fine harbour; floating dock; graving dock (opened 1905); torpedo station; good railway and telegraphic communication;

handles 80 per cent. of entire Egyptian trade; exports cotton, wool, sugar, eggs; imports coal, textiles, machinery. Pop. 570,500. (2) Tn., Dumbartonshire, Scotland, on R. Leven; bleaching, dye works. Pop. 10,500. (3) Tn., Virginia, U.S.A., on Potomac riv.; fertilizers, silk, leather, shoes, bottles. Pop. 24,000.

Alexandropol. See LENINAKAN.

Alexan'drovsk, (1) Port, Murman coast, n. Russia; terminus of Murman rly.; ice-free throughout the year. (2) See ZAPOROZHE.

Alexan'drovsk - Grushev'ski, tn., North Caucasian Area, R.S.F.S.R., 50 m. n.e. of Rostov; in anthracite coal dist. Pop. 20,000.

Alexandrovsky, tn., Russia, 5 m. s.e. of Leningrad; cotton, glass, porcelain. Pop. 10,000.

Alföld (*ol'fild*), the great central plain of Hungary; grain, fruit, wines.

Al'ford, (1) Vil., Aberdeenshire, Scotland, on R. Don, 29½ m. n.w. of Aberdeen; centre of agricultural dist.; stone circle; Kildrumny Castle is 10 m. to w. Pop. 600. (2) Urb. dist., Lincs, England, 23½ m. by rail n.e. of Boston; mkt. tn. Pop. 2,200.

Alfreton (*aul'fre-ton*), mkt. tn., Derbyshire, England, 14 m. n.e. of Derby; collieries, ironworks, potteries. Pop. 21,200.

Algar'va, southmost prov., Portugal; mts. in n.; fertile and well cultivated in s.; fruit and fisheries. Area, 1,937 sq. m.; pop. 270,000.

Algeciras (*âl-cheth-'râs*), port, Spain, opposite Gibraltar (5 m.); whale and other fisheries; winter resort. Pop. 20,500.

Alge'ria, Fr. colony, N. Africa; bounded n. by Mediterranean, e. by Tunisia, s. by Sahara, w. by Morocco. Country divided by elevation and climatic conditions into three unequal parallel zones: (1) The Tell, undulating n. region (containing the Little Atlas) of forests and arable land; (2) The Steppe region of herbaceous vegetation and of pasture land diversified by ranges of mts.; (3) The Sahara (s. of Sahara Atlas), where agriculture

is possible only by irrigation in oases. Coast, 690 m.; high and rocky. Rivs. nothing but torrents (*wadis*), frequently dried up; some dammed for irrigation; in steppes they form the *Shotts* of the plains, shallow lakes where snow and rain-water gather in winter. Climate, Mediterranean type; two seasons—dry and hot (summer), wet or cold (autumn, winter, spring). Great forests on the mt. slopes, containing oaks, cedars, junipers, and other trees. Cultivated plants include cereals—wheat, oats, and barley being grown in the Tell—flax, and tobacco; vines, olives, oranges, and other fruits cultivated, and various vegetables grown. Olive oil produced; important fisheries; horses, mules, cattle, and sheep raised in large numbers. Minerals include iron, lead, copper, zinc, phosphates, salt, petroleum, antimony, mercury. Among exports are sheep, wool, hides, cereals, cattle, horses, fruit, wines, olive oil, eggs, metals, phosphates, tobacco; imports textiles, petroleum, motor-cars, machinery, paper, coal, sugar, coffee. Rly. mileage is over 2,700; good postal and telegraphic communications. Chief seaports, Algiers (cap.), Bougie, Philippeville, Oran, Bona; largest inland tn., Constantine. Inhabitants include French, Jews, Moroccans, etc. Area, 847,500 sq. m.; pop. 6,000,000 (835,000 Europeans).

Alghero (*al-gà'rò*), port, Sardinia; coral fisheries; fruit; wine. Pop. 12,500.

Algiers (*al-jèrz*), cap., Algeria, N. Africa; modern tn. along shore, anc. city on hill behind; important port, coaling station, and health resort; good harbour; exports grain, fruit, wool. Pop. 226,000.

Algo's Bay, wide, shallow bay, S. Africa; Brit. emigrants landed here in 1820 and founded Port Elizabeth.

Alhambra, tn., Los Angeles, California, U.S.A., at entrance to San Gabriel valley; mainly residential, but manufactures power appliances, electrical supplies, beeswax, and earthenware. Pop. 30,000.

Alicante. (1) Prov., S.E. Spain; almonds, olives, oranges, grapes. Area, 2,185 sq. m.; pop. (prov.) 533,000. (2) Cap. of above, on Mediterranean Sea; exports wine, esparto grass, fruit. Pop. 68,500.

Alice, tn., Cape Prov., S. Africa, 88 m. w. by N. of East London by rail; tourist resort; it is near Lovedale mission station.

Alice Springs, administrative centre, Central Australia; on overland railway line; cattle station.

Aligarh (*â-lô-gur*), anc. tn., United Provinces, India, 75 m. S.E. of Delhi; Moslem univ. Pop. 67,000.

Aliquippa, tn., Pennsylvania, U.S.A., 20 m. N.W. of Pittsburgh; iron and steel industries. Pop. 27,000.

Aliwal North, tn., Cape Prov., S. Africa, on Orange riv.; alt. 4,300 ft. Health resort; sulphur springs. Pop. 6,500.

Alkmaar, tn., Netherlands, 24 m. by rail N.W. of Amsterdam; cheese trade centre; salt. Pop. 27,500.

Allahabad, cap., United Provinces, India, at confluence of Jumna with Ganges; great annual fair; centre of pilgrimage; rly. centre. Pop. (tn.) 157,500.

Alleghany (*âl'i-gâ-nâ*) **Mountains**. See APPALACHIANS.

Al'legheny. (1) Part of Pittsburgh, Pennsylvania, U.S.A.; residential, manufacturing centre; iron, steel industries. (2) Riv., rises in W. of New York State, U.S.A., joins R. Monongahela at Pittsburgh, forming R. Ohio.

Al'len, Lough, between counties of Leitrim and Roscommon, I.F.S. R. Shannon navigable from here to sea. Length, 5 m.; breadth, c. 3 m.

Al'len, Bog of, group of morasses in cos. Kildare, Offaly, Leix, and West Meath, I.F.S.; area, c. 240,000 ac.

Allenstein, tn., E. Prussia, Germany, 64 m. S. of Königsberg; saw-mills, breweries, match factory. Pop. 38,000.

Allentown, city, Pennsylvania, U.S.A., 50 m. N.W. of Philadelphia; one of leading furniture and silk pro-

ducers in U.S.A.; tobacco, machine-shop products. Pop. 92,000.

Alleppey, tn., Travancore, s.w. India; commercial centre; good harbour; oil-mills; coffee, cardamoms. Pop. 32,000.

Allier (*âl-yâ*'), (1) Dep., central France; fertile; cereals, fruits; livestock; coal, iron; mineral springs. Chief tns., Moulins, Montluçon, and Vichy. Area, 2,849 sq. m.; pop. 370,000. (2) Riv., France; flows n. through Central Plateau to join Loire. Length, 270 m.

Allua, tn. and port, Clackmannanshire, Scotland, on R. Forth; yarn factories, breweries, distilleries, glass works; exports coal. Pop. 13,300.

Alloway, vil., Ayrshire, Scotland, 2 m. s. of Ayr; birthplace of Robert Burns; cottage now a Burns Museum.

Alma, riv., Crimean Rep., Russia; enters Black Sea 17 m. w. of Sevastopol; scene of Franco-Brit. victory over Russians, 1854.

Alma Ata, or **VERNI**, tn., s.e. Kazak, U.S.S.R.; cattle breeding; bee keeping; vines and fruits. Pop. 45,000.

Almaden (*âl-mâ-thân*'), tn., Estremadura, Spain, 48 m. s.w. of Ciudad Real in Sierra Morena Mts.; quicksilver mines worked for over two centuries; Moorish castle. Pop. 10,000.

Almelo (*âl-mâ-lô*'), tn., Overijssel, Netherlands; yarn, cotton goods; manufactures damask. Pop. 29,000.

Almeria (*âl-me-rê'a*). (1) Prov., s. Spain; fruit, especially grapes; esparto; iron ore; chief riv., Almeria, Almanzora, have fertile valleys. Area, 3,360 sq. m.; pop. 373,000. (2) Tn., cap. of above, on Mediterranean Sea; oil-fuel port; exports grapes, esparto; iron, lead. Pop. 51,000.

Almond. (1) Riv., Scotland; enters Firth of Forth at Cramond. (2) Riv., Perthshire, Scotland; enters Tay at Scone.

Almondbury (*âm'bur-i*, *aum'bur-i*, or *â'mond-bur-i*), tn., Yorks, England; forms s.e. part of Huddersfield. Pop. 15,500.

Almo'ra, tn., United Provinces, India, on slopes of Himalayas; alt. 5,400 ft.; health resort; orchards, tea. Pop. 8,500.

Almouth (*âl'muth*), wat.-pl., Northumberland, England, at mouth of R. Aln, 4 m. s.e. of Alnwick.

Alnwick (*an'ik*), mkt. and co. tn., Northumberland, England. Alnwick Castle, seat of Percies since 1310. Brewing, tobacco; fishing-tackle. Pop. 6,900.

Al'ora, tn., Spain, 25 m. n.w. of Malaga by rail; oranges, lemons, olives; hot sulphur springs; mediaeval ruins. Pop. 11,500.

Al'ort, tn., E. Flanders, Belgium; centre of hop trade; linen, silk, and cloth. Pop. 37,000.

Alpe'na, city, Michigan, U.S.A., on e. coast of Lake Huron; cement and paper factories; tanneries; lumber; mineral products. Pop. 12,000.

Alpes, BASSES. See BASSES-ALPES.

Alpes-Maritimes (*alp-mâ-rê-têm*), dep., s.e. France; sheep pasturage; olives, wines, fruits; health resorts, Nice, Cannes, Mentone. Area, 1,443 sq. m.; pop. 435,500.

Alps, crescent-shaped mt. system, extending from Gulf of Genoa to Vienna; total length, c. 700 m.; breadth, 30-160 m.; area, c. 80,000 sq. m.; topographically divided into (1) W. Alps (Col di Tenda to Simplon), including Maritime Alps, Cottian Alps, Dauphiné Alps, Graian Alps, chain of Mont Blanc, Pennine Alps; (2) Central Alps (Simplon to Reschen, Scheideck, and Stelvio), including Bernese Alps, N. Swiss Alps, Lepontine and Adula Alps, Todi group, Rhaetian Alps; (3) E. Alps, (Reschen, Scheideck, and Stelvio to the Semmering), including Ortler, Adamello, and Brenta groups, Limestone Alps of Bavaria, N. Tyrol and Salzburg, Central Tyrolean Alps, S. Tyrolean Alps (Dolomites), S.E. Alps (Carnic, Karawanken, and Julian Alps). Snow-line varies from 8,900 ft. on s. side to 9,200 ft. on n.; glaciers of upper valleys descend to 4,000-5,000 ft. above sea-level—Aletsch, 4,400 ft.

Best-known peaks of Western Alps—Gran Paradiso (13,320 ft.), Mont Blanc (15,780), Dent du Midi (10,690), Matterhorn (14,775), Monte Rosa (15,215), Aletschhorn (13,770), Jungfrau (13,670), Mönch (13,460), and Finsteraarhorn (14,020).

Drained by Rhine and tributaries, Aar, Reuss, Limmat; Danube and tributaries, Iller, Lech, Isar, Inn; Po and tributaries, Dora Riparia, Ticino, Minicio, Adige; Rhone with Arve, Isère, Durance; and smaller streams flowing to Adriatic and Ligurian Sea.

Chief passes: Great St. Bernard, *n.* of Mont Blanc to Rhone; Mont Cenis, from R. Dora Riparia *n.w.* to Arc and Isère; Simplon, from Maggiore to Brieg; St. Gotthard, from Ticino to Upper Reuss valley; Brenner, from Adige to Innsbruck. There are railways crossing by Col dell' Altare; Mont Cenis, tunnel over 7½ m. long, opened 1871; Simplon, tunnel 12½ m. long, opened 1906; St. Gotthard, tunnel over 9½ m. long, opened 1882; Arlberg, opened 1884; Brenner, opened 1867, series of twenty-seven tunnels; Semmering, opened 1853. Several non-snowy peaks have tourist railways up their slopes; the only snowy peak with one is Jungfrau. Highest villages, Juf (6,998 ft.) in Grisons, L'Ecot (6,713) in Savoy, St. Vêran (6,726) in Dauphiné, Trepalle in Ital. Alps (6,788), Ober Gurgl (6,322) and Fend (6,211) in Tyrolean Alps; minerals abound in Austrian part of range, where coal, iron, lead, gold, silver, copper, and mercury are worked.

The distinctive Alpine plants include gentians, saxifrages, rhododendrons, primulas, edelweiss; general characteristics are dwarfish woody stems, large flowers, woolly texture. Fauna includes bouquetin or Alpine ibex, marmot, chamois, white hare, fox, lynx, wild-cat, wolf, bear; vultures, eagles, ptarmigan, grouse, etc., are found.

Alsace-Lorraine (*äl-säs' lor-än'*): Alsace, the most easterly region of

France, stretches from the crest of the Vosges Mts. to the R. Rhine; Lorraine, which lies *n.w.* of Alsace, consists of a low plateau drained by the Saar (Sarre) in the *e.*, and the Moselle in the *w.* Cereals, potatoes, sugar-beet, flax, tobacco, hemp, fruit, and wine are the principal products. Forests, all state-owned, occupy 30 per cent. of total area. Minerals—iron, coal, salt, and building stone—are concentrated in Lorraine. Potash deposits in Alsace extremely valuable. Chief industries of Lorraine are iron smelting and founding, and the manufacture of machinery; of Alsace, textiles, glass, porcelain, chemicals, and paper. There are 1,320 m. of railways and a number of canals—Rhine-Marne, the Rhine-Rhone, and the coal canal of the Saar (Fr. Sarre). The prov. of Alsace is divided into depts. of Haut-Rhin (chief tns., Mulhouse and Colmar), and Bas-Rhin (Strasbourg); Lorraine includes depts. of Moselle (Metz), Meurthe-et-Moselle (Nancy), Meuse (Bar-le-Duc), and Vosges (Epinal). Surrendered by France to Germany, 1871; restored to France after Great War. Alsace, area, 3,202 sq. m.; pop. 1,162,000. Lorraine, area, 9,150 sq. m.; pop. 1,786,000.

Alsager (*äl'sä-ger*), urb. dist., Cheshire, England, 5½ m. *e.* of Crewe. Pop. 2,900.

Alsatia, old name for Alsace. It was also the name given to the Whitefriars dist., London, which, till 1697, was a debtors' sanctuary and haunt of thieves.

Alsen (*äl'sen*), isl., Baltic Sea, in Little Belt; Dan. till 1864, then Prussian; returned to Denmark, 1920. Area, 120 sq. m.; pop. 25,000.

Alston (*äl'ston*), tn., Cumberland, England, in Pennine Mts.; limestone quarries. Pop. 3,000.

Altai Mountains (*äl-tä'*), Central Asia. Altai proper and Greater Altai stretch from Gobi *n.w.* in two parallel ranges across Siberian frontier. Contains upper streams of Ob and Irtysh rvs. Northern Altai (highest peak, Byelukha, 14,890 ft.), to the *n.* of and

parallel to first group. Altai consist of schists, granite, slate, carboniferous and Devonian deposits. Alpine and herbaceous plants; forests. In Russian Altai, copper, lead, zinc, silver, gold.

Altamaha', riv., Georgia, U.S.A., enters Atlantic Ocean; navigable for small vessels to Macon; length, 153 m.

Altamu'ra, tn., Apulia, s.e. Italy; wine; wool. Pop. 27,000.

Altdorf, cap., Uri, Switzerland, near s.e. end of L. Lucerne; alt. 1,516 ft.; associated with William Tell; large statue. Pop. 4,000.

Altenburg (*äl'ten-boorg*), tn., Thuringia, Germany, 23 m. s. of Leipzig; horse fairs; woollen yarn. Pop. 42,000.

Al'tendorf, suburb of Essen, Rhineland, Prussia.

Altmühl (*äl'mool*), riv., Bavaria, Germany; joins Danube w. of Regensburg; connected with R. Main by Ludwig's Canal; total length, 116 m.

Al'tofis, urb. dist., W. Riding, Yorks, England, 7 m. s.e. of Leeds; coal mining. Pop. 5,000.

Alton (*aul'ton*), (1) Tn., Hants, England, 15 m. n.e. of Winchester; corn markets. Pop. 6,200. (2) Tn., Illinois, U.S.A., on Mississippi R.; manufactures of machinery, glass, flour. Pop. 30,000.

Altona (*äl'tö-na*), tn., Schleswig-Holstein, Prussia; on R. Elbe, near Hamburg, and commercially incorporated with it; fine docks; ship repairing, brewing, ironfounding, flour milling, cotton, woollen, tobacco, leather, glass, and soap manufactures. Pop. 185,000.

Altoona, tn., Pennsylvania, U.S.A., 117 m. e. of Pittsburgh; in coalfield; centre of railway work. Pop. 82,000.

Altrincham (*äl'tring-am*), tn., Cheshire, England, 8 m. s.w. of Manchester by rail; linotype works, engineering, and market garden produce; aerodrome. Pop. 21,400.

Altyn-Tagh (*äl'tin-tach*), mts., northernmost range of Kunlun Mountains, Central Asia.

Al'va, tn., Clackmannanshire, Scot-

land, 3½ m. n. of Alloa; manufactures serges and tartans. Pop. 3,800.

Al'verstoake, par., Hants, England, on Portsmouth Harbour; includes Gosport; several barracks. Pop. 33,600.

Alwar (*äl'wur*). (1) Indian state, Rajputana, India. Area, 3,185 sq. m.; pop. 702,000. (2) Cap. of above, 85 m. s.w. of Delhi; palaces. Pop. 45,000.

Alyth (*äl'lieth*), mkt. tn., Perthshire, Scotland, 4½ m. e.n.e. of Blairgowrie; jute, wool. Pop. 1,700.

Amade'us Lake, shallow salt lake, S. and W. Australia; discovered by Giles (1872). Length, 200 m.

Amager, low, flat isl., off Zealand, Denmark; market garden of Copenhagen. Christianshavn is on w. side.

Amal'fi, port, Gulf of Salerno, Italy; devastated by inundations (1343), and by earthquake (1930). Now a tourist resort. Fisheries; macaroni, paper, soap. Pop. 7,000.

Aman'us (Turkish *Alma Daghi*), mt. range, n.w. Syria; caravan routes through passes.

Amara. See KUT-AL-IMARA.

Amaril'lo, tn., N. Texas, U.S.A.; rly. jn. and trade centre; oil refining, zinc smelting; creameries and grain elevators. Pop. 43,000.

Amasia (*ä-mä'sä*), tn., Asia Minor, Turkey, on Yesil Irmak riv.; rly. to Samsun, 50 m. distant, on Black Sea; silk, wine, fruit, salt. Pop. 61,000.

Amatitlan', tn., s. Guatemala, on lake of same name; hot springs near lake; cochineal. Pop. 40,000.

Amaton'galand, terr., E. coast, S. Africa; annexed to Natal (1897). Area, c. 600 sq. m.; pop. c. 13,500.

Am'azon, great riv. of Brazil, S. America; flows from Andes along equator to Atlantic Ocean; largest river of world in volume; area of basin 2,700,000 sq. m. (two-fifths S. America); head stream Alto Marañon (Peru), which issues from Lauricocha Lake (alt. 11,980 ft.). Numerous affluents form giant network of streams debouching into Atlantic at

rate of 2,342,000 cub. ft. per second. Alto Marañon becomes navigable for small craft 2,700 m. from Atlantic. Ocean-going steamers penetrate to Iquitos (1,935 m. from mouth). On entering Brazil known as Solimões—tribs. Javary (550 m.), Juchá (400 m.), Jurua, and Purus, r. bk.; Putumayo (650 m.), Japura (930 m.), 1 bk. At confluence of Negro (480 m.), on the l. bk., is Manaos. Below this, main stream known as Amazon. Joined (r. bk.) largest of tribs. Madeira. Other notable tribs.: Tapajoz, Xingu, and Tocantins (500 m.). Negro connected by Beni and Marmore; Madeira-Marmore railway facilitates transport of produce from Bolivia and Brazilian prov. of Matto-Grasso. Tidal influence felt 400 m. upstream. In flood time enormous areas of surrounding country under water, thus fertilizing trees producing 'Para' rubber. Breadth at mouth, 200 m.; from 3 to 4 m. or more at 1,000 m. from ocean. Numerous marshy islands at mouth; largest Marajo (2,060 sq. m.). Total length of Amazon 4,000 m.; of waterways in system 30,000 m. Yellow and other fevers common; campaign against fever-bearing mosquito in progress. Produce of region: rubber, quinine, caffeine, cotton, indigo, nuts, sugar, cacao, coffee, tobacco. The river is said to contain a fresh-water replica of every salt-water fish. Turtles abound.

Amazônia. (1) State, Brazil; forest country produces rubber, timber, vegetable ivory, tropical fruits; grassy uplands support cattle. Manaos commercial centre. Area, 704,835 sq. m.; pop. 410,000. (2) Dep., Peru, in R. Amazon basin; rubber. Area, 13,943 sq. m.; pop. (est.) 80,000. (3) Terr., s. Venezuela; rubber, wild cacao; great part unexplored. Pop. c. 60,000.

Ambaca, tn., Angola (Portuguese W. Africa); 140 m. e. by s. of Loanda by rail; centre of coffee-growing dist.

Ambala, tn., Punjab, India, on rly. between Delhi and Lahore; military cantonment; cotton ginning; flour mills. Pop. 76,300.

Ambato, tn., Ecuador, 80 m. s. of Quito; alt. 8,500 ft. Sugar, cereals, cochineal; boots, shoes, and cordage. Pop. 25,000.

Amburg, tn., Bavaria, Germany, 35 m. e. of Nürnberg; coal and iron in vicinity; varied manufactures. Pop. 26,500.

Ambert (*on-bâr*), tn., dep. Puy de Dôme, France, 55 m. w. by s. of Lyons. Celebrated paper mills; also excellent cheese. Pop. 8,000.

Ambles, seapt., Northumberland, England, at mouth of R. Coquet; coal exports; fish curing. Pop. 4,200.

Ambleside, mkt. tn., Westmorland, England, 1 m. from head of L. Windermere. Centre for tours in Lake Dist. Pop. 2,300.

Ambon, na, most important isl. of Moluccas, Dutch E. Indies; produces ordinary tropical fruits and vegetables; cloves; copra; Amboina wood. Area, 386 sq. m.; pop. 115,000.

Ambrosia, port, Angola (Portuguese W. Africa); c. 70 m. n. of Loanda. Exports sugar-cane, rubber, coffee, and copper. Pop. 3,000.

America, two continents (connected by isthmus), western hemisphere; comprises N., S., and Central America; total area, c. 16,000,000 sq. m.; total pop. c. 210,000,000; named after the navigator, Amerigo Vespucci, who followed up Columbus.

N. AMERICA is bounded n. by Arctic Ocean; n.e. by Smith Sound, Baffin Bay, Davis Strait; s.e. by Atlantic; s. by Gulf of Mexico and Central America; w. and s.w. by Bering Strait, Bering Sea, Pacific. Extreme length is c. 4,500 m.; width, c. 3,300 m.; area, c. 8,300,000 sq. m. Continent expands broadly in n. and tapers to the s. Coast-line is much indented. Surface consists of great lowland region in centre, drained by large rivers; in n. are highlands and in w. high mountain ranges. Principal mts. in w. are the Cordilleras, including the Rockies, and a parallel range known as Sierra Nevada in California and as Cascade range farther n. (chief peak of Rockies, Mt. McKin-

ley, 20,300 ft.; of Sierra Nevada, Mt. Whitney, 14,900 ft.); and in E. Appalachian Mts. (highest peak, Mt. Mitchell, 6,700 ft.). Principal rivs. are St. Lawrence in E., Yukon, Fraser, Columbia, Colorado in W., Mississippi-Missouri, Peace-Mackenzie, Saskatchewan-Nelson draining central plains and flowing respectively to Gulf of Mexico, Arctic, and Hudson Bay. Chief lakes are Great Bear, Great Slave, Athabasca, Deer, Wollaston, Winnipeg, in Canada; Superior, Michigan, Huron, Erie, Ontario, between Canada and U.S.A.; Great Salt Lake in U.S.A. Chief islands are Newfoundland, Cape Breton, Anticosti, Prince Edward I., off E. coast of Canada; Vancouver, Queen Charlotte Is., Prince of Wales I., Aleutians, off W. coast; some of W. Indies in S.; Arctic archipelago.

Climate varies; has great extremes in centre. There are vast forests of pine, beech, oak, hickory, ash, sycamore, chestnut, and other trees; enormous quantities of wheat, maize, barley, potatoes, peas produced; many fruits cultivated; rice, sugar, coffee, cotton grown. Minerals include coal, iron, gold, silver, copper, lead, nickel, salt, petroleum.

Political divisions are Dominion of Canada, which includes all British North American possessions except Newfoundland, in N. half; United States of America and Mexico in S. half; Alaska in N.W. belongs to U.S.A. Pop. c. 130,000,000.

CENTRAL AMERICA unites N. and S. America; extreme length, c. 1,000 m.; breadth, 70 to over 300 m.; area, c. 210,000 sq. m.; bounded N. by Mexico, E. by Caribbean Sea, S. and W. by Pacific. Northern part is mountainous, with steep slope to Pacific, and tableland, intersected by valleys, sloping more gradually to Atlantic; narrow S. part is mountain from sea to sea. There are many volcanoes. The mountain barrier disappears in two places: first, at the Isthmus of Panama, where the Panama Canal connects the Atlantic with the Pacific; and also between

Nicaragua and Costa Rica, where the R. San Juan and Lakes Nicaragua and Managua afford an easy passage from sea to sea. Political divisions are British Honduras in N.E. and the independent states of Guatemala, Honduras, Salvador, Nicaragua, Costa Rica, and Panama. Climate varies according to elevation; earthquakes frequent. In tropical belt, rubber, mahogany, cacao occur; coffee and grain are largely produced; other products are sarsaparilla, tortoiseshell, fruits, indigo, hides. The people are of Indian or mixed Span. and Ind. race. Pop. c. 5,500,000.

THE WEST INDIES lie to the E. of Central America, between N. and S. America. They include Cuba and Haiti, which are independent reps., the Bahamas, Barbados, Trinidad, Jamaica, Leeward and Windward Islands, which belong to Britain.

SOUTH AMERICA is bounded N. by Caribbean Sea, N.E. by N. Atlantic, E.S.E. by S. Atlantic, W. by Pacific. Extreme length is c. 4,750 m.; breadth, c. 3,200 m.; area, 7,300,000 sq. m. Whole of W. side is occupied by the Andes, from the N. of which an offshoot curves round by the N. side of the Orinoco. Along the S. side of the lower Orinoco, and eastward, is the plateau of Guiana; and in E., between mouth of Amazon and Rio de la Plata, is plateau of Brazil. Rest of surface consists of great plains—wooded selvas and grassy llanos and pampas. N. is drained by Colombian Magdalena and Orinoco, N. centre by Amazon and its tributaries and Tocantins; extreme E. projection by San Francisco R.; S. centre by Paraguay, Parana, Uruguay, and their tribs. Coast-line little broken, except at river mouths and along S. part of W. side. Chief lake is Titicaca, in Bolivia and Peru.

Climate varies from tropical to temperate. There are enormous forests, those in tropical regions having magnificent trees and flowering plants. Fruits grown include oranges, pine-apples, guavas, mangoes, bananas;

rubber, coffee, quassia, cinchona, tapioca, vanilla, indigo, cacao, sugarcane also produced. Minerals include gold, silver, diamonds, copper, iron, tin.

Political divisions are the republics of Colombia, Venezuela, Ecuador, Brazil, Peru, Bolivia, Chile, Argentine Republic, Paraguay, Uruguay; colonies of British, Dutch, and French Guiana in N.E.; Falkland Islands in S.E. belong to Britain. Pop. c. 65,000,000.

Races.—Arctic regions of N. America are inhabited by Eskimos, a yellow race, who live chiefly by fishing and seal-hunting; they are short, fat, with black hair and brown skin. Their origin has not been authoritatively established. Aboriginal inhabitants of remainder of continent were Indians; these are generally tall and well developed, with black hair and high cheek-bones. These Amerinds are called 'Red Indians' from the copper-coloured skin of certain tribes. Best-known tribes are the Sioux in the W. plains, the Iroquois in Canada and elsewhere, the Araucarians and Patagonians in S. America. Aztecs of Mexico and Incas of Peru were civilized. In Mexico and Central America the people are chiefly creoles and half-breeds; in Brazil are large numbers of Negroes and mulattoes, while the S. American pampas are the home of a mixed race called the Gauchos. There are many Negroes in U.S.A. The European inhabitants of N. America are chiefly of Brit., Ger., and Scandinavian descent, those in S. America of Span., Port., and Italian descent.

Amersfoort (*ā-mers-fōrt*), tn., Holland, 11 m. N.E. of Utrecht; riv. jn.; cottons, woollens, leather, soap, beer, and tobacco. Pop. 36,000.

Am'ersham, tn. and par., Bucks, England, 26 m. W.N.W. of London; flour mills; breweries; chair and lace making industries. Pop. 4,500.

Amesbury (*āms'ber-i*). (1) Tn. and par., Wilts, England, famous for large earthwork of Bronze or Neolithic age.

Stonehenge 1½ m. distant. Sheep fairs. Pop. (par.) 1,530. (2) Tn., Massachusetts, U.S.A., 43 m. N. of Boston; cotton goods, motor-cars and accessories. Pop. 12,000.

Amha'ra. See ABYSSINIA.

Amherst (*ām'erst*). (1) Tn., Massachusetts, U.S.A., 16 m. N. of Springfield; noted college; manufactures straw hats. Pop. 6,000. (2) Port, Nova Scotia, Canada; shipbuilding yards. Pop. 10,000. (3) Fishing vil., Burma, 32 m. S. of Moulmein. Pop. c. 3,500.

Amiens (*ā-mē-an'*), chief tn., Somme, France, on R. Somme; market gardens; manufactures linen, woollens, silks, velvets. Cathedral is one of finest Gothic buildings in Europe. Pop. 92,000.

Amiran'te Islands, coral group, 120 m. S.W. of Seychelles, by which they are administered; guano and phosphate deposits. Pop. c. 100.

Am'lweh (*am'looch*), port and wat-pl., Anglesey, N. Wales, 15 m. S.W. of Beaumaris; has some coasting trade. Pop. 2,600.

Am'manford, urb. dist., Carmarthenshire, Wales, 7 m. S. of Llandilo; coal mines; tin and oil works. Pop. 7,200.

Amoy, treaty port, Fuzhou, China; fine protected harbour; formerly great tea port; now exports bricks, fruits, china ware, and grass-cloth. Pop. 115,000.

Ampt'hill, urb. dist., Beds, England, 7 m. S. of Bedford. Sir Philip Sidney said to have written *Arcadia* at Houghton House (ruins in neighbourhood). Pop. 2,200.

Amrao'ti, tn., Berar, India, c. 80 m. W. of Nagpur; cotton mills and textile trade. Pop. 41,000.

Amrit'sar, city, Punjab, India, 32 m. E. of Lahore; religious cap. of Sikhs, and, next to Lahore, most flourishing city of Punjab. Manufactures Kashmir shawls, fine silks, and carpets. Pop. 160,500.

Am'sterdam. (1) Port, and commercial cap. of Holland; at mouth of Amstel; built on piles; intersected by

canals; connected with North Sea by two canals (1825 and 1876). Busy and extensive harbour. Chief industries: diamond cutting, sugar refining, tobacco, cigars, shipbuilding, engineering. Exports: Dutch produce, butter, cheese. Pop. 735,000. (2) City, New York, U.S.A., 33 m. n.w. of Albany; manufactures woollen and knit goods. Pop. 35,000.

Amu Darya. See *Oxus*.

Amur (*ā-moor*). (1) Prov., Far Eastern Area, U.S.S.R.; vast tracts uninhabited; mountainous; climate continental; gold mines; stock raising; fisheries. Chief tn., Blagov'yeshchensk; administrative centre, Khabarovsk. Area, 95,000 sq. m.; pop. 394,000, chiefly Russians. (2) The 'Great River,' formed by junction of Shilka and Argun, forms part of boundary between U.S.S.R. and Manchuria. Navigable for light craft below Blagov'yeshchensk. Chief tribes, r. bk., Sungari and Ussuri; enters sea at Nikolaievsk, opposite n. end of Sakhalin. Amur system affords 8,400 m. waterways navigable from May to October.

An'a, tn., Iraq, on river Euphrates, 80 m. n.w. of Hit; agriculture, viticulture, and fruit growing; formerly chief Arab trading centre on Euphrates. Pop. c. 15,000.

Anaconda, city, Montana, U.S.A., 26 m. n.w. of Butte; alt. 5,300 ft.; copper, zinc, manganese. Pop. 13,000.

Anadyr (*ā-nā-dēr*), riv., Far Eastern Area, U.S.S.R.; rises in Stanavoi Mts., falls into Gulf of Anadyr; length, 500 m.; slow and shallow.

Anahuac (*ā-nā-wāk*), central tableland of Mexico, from valley of Mexico to El Paso on Rio Grande del Norte; contains many *barrancas* or cañons. Alt. 7,500 ft.

Anamāl'ai Hills, mt. range, Coimbatore dist., Madras, India, containing highest elevations (8,850 ft.) s. of Himalayas. Densely forested.

Anan'iev, tn., govt. Kherson, Ukraine, U.S.S.R., 100 m. n. of Odessa; centre of great wheat-growing dist. Pop. 20,000.

Anato'lia. See *ASIA MINOR*.

Anco'na. (1) Prov., Italy, in the Marches, between Central Apennines and Adriatic; silkworms reared, grain and fruit grown; sulphur mined. Area, 748 sq. m.; pop. 335,000. (2) Tn., cap. of prov., on Adriatic, 123 m. from Venice; fine harbour; sugar refining; shipbuilding; exports tartar, hides, silk, asphalt. Pop. 66,500.

Ancre (*ānkr*), small riv., trib. of R. Somme, n. France; rises in chalk down 4 m. s. of Bapaume, and flows past Albert to R. Somme, 10 m. e. of Amiens.

An'crum, vil., Roxburghshire, Scotland, 3½ m. n.w. of Jedburgh; *An'crum Moor*, 2 m. n.w., scene of battle in which English defeated by Scots (1545). Pop. 900.

Andalusia (*ān-dā-loo-shē-ā*) (Spanish *Andalucía*), largest of anc. s. divs. of Spain, divided into Upper and Lower; now includes provs. of Almería, Cadiz, Córdoba, Granada, Huelva, Jaén, Málaga, and Seville. Watered by Guadalquivir; mountainous in n. and s., elsewhere very fertile and productive. Chief tns.: Seville, Málaga, Granada, Cadiz. Produces sherry, silk, fruit; copper, lead.

Andaman' and Nic'obar Islands, two groups of islands (200) forming one province of British India, 600 m. from mouth of Hughli, in Bay of Bengal. Hilly and well-wooded. Chief harbour, Port Blair. Natives negroid, of low stature and civilization. Islands were convict settlement of Indian Government, but transport ceased in 1921. In 1926 convicts numbered 7,963, of whom more than half were on ticket-of-leave and were working to support themselves. Islands are rich in timber, including marblewood. Tea, coffee, rice, sugar-cane, and maize are cultivated. Area, 2,308 sq. m.

Andenne (*on-dēn'*), tn., prov. Namur, Belgium, on R. Meuse, 11 m. e. of Namur; in zinc, iron, lead, and coal mining dist.; manufactures paper and pottery. Pop. 8,000.

An'derlecht, tn., Belgium; s.w.

suburb of Brussels; cotton mills and dyeworks. Famous for subterranean church of St. Guy.

An'dermatt, vil., upper valley of R. Reuss, Uri, Switzerland (alt. 4,738 ft.); chief military station of St. Gotthard Pass. Winter health resort. Pop. 1,000.

An'dernach, tn., Rhineland, Prussia, on R. Rhine, 11 m. s.w. of Coblenz. Trade in millstones and tufa. Pop. 11,000.

An'derson. (1) Tn., Indiana, U.S.A., 40 m. n.e. of Indianapolis; iron, steel, brass, paper. Pop. 40,000. (2) Tn., S. Carolina, U.S.A., 120 m. s.w. of Columbia; cotton manufactures. Pop. 11,000.

Andes (*ān'dēs*), mt. system extending along w. side of S. America from Isthmus of Panama and mouth of Orinoco to Tierra del Fuego. In middle section, two main chains; elsewhere three. Total length of system, 4,000 m. In Ecuador, eighteen giant peaks are over 15,000 ft. (Chimborazo, 20,498); highest peak, Aconcagua (22,868 ft.), ascended by Rankin in 1902; to the s. of 20° s., breadth exceeds 500 m. Lake Titicaca (alt. 12,000 ft.) has area of 3,300 sq. m. Many volcanoes still active. Minerals: gold, silver, copper, iron, manganese, tin, sodium nitrate, borax, and quicksilver. Richest metal-bearing states are Peru and Bolivia; latter contains famous silver mt. of Potosi. In 1910 Andes tunnelled and Argentine and Chilean rlys. linked up by Uspallata tunnel (c. 2 m. long; alt. 10,500 ft.). Rly. from Buenos Aires to Bolivia connects with lines to Antofagasta and Arica in Chile and to Mollendo in Peru (*via* steamer on Lake Titicaca).

Andijan', tn., prov. Ferghana, Uzbek rep., U.S.S.R., on l. bk. of Sir Darya (alt. 1,500 ft.); terminus of branch of Transcaspian Rly. from Bokhara (completed 1899). Famous for its gardens; grows and manufactures cotton. Pop. 74,000.

Andor'ra, small Pyrenean semi-independent state on Franco-Spanish frontier, in a high valley (3,000 ft.)

among peaks rising to 10,000 ft. Pays annual tax of about £40 to Spain. There are six chief villages. Life of people of primitive simplicity. Cattle rearing, horse breeding, vines and tobacco; smuggling between France and Spain a regular industry. Cap. Andorra. Area, 191 sq. m.; pop. 5,500.

An'dover. (1) Bor., Hants, England, 27 m. n. of Southampton; iron-works; malting; Royal Air Force Staff College. Pop. 9,700. (2) Tn., Massachusetts, U.S.A., 10 m. n. of Lowell; woollen and rubber goods. Pop. 10,000.

An'dria, tn., Apulia, s. Italy; has large trade in almonds. Pop. 60,000.

An'dros, largest of Bahama Is., W. Indies; all settlements on e. coast. Sponge collecting; sisal hemp-culture.

Andujar (*ān-doo'har*), tn., prov. Jaen, Spain, on R. Guadalquivir; flour, oil, wax candles, and porous water-coolers. Pop. 18,000.

Angara', riv., Siberian Area, U.S.S.R.; traverses Lake Baikal; exit s.w. side; trib. of Yenisei. Length, 1,300 m.

Angermanland (*ong'er-mān-lānd*), beautiful dist. on Gulf of Bothnia, Sweden; formerly a prov., now in govt. of Westernorrland. Agriculture, forestry, stock raising, and mining.

Angers (*on-shā'*), chief tn., Maine-et-Loire, France; agricultural centre, textiles, ironware; slate quarries near. Pop. 78,000.

Anglesey or **ANGLESEA**, isl. and co., Wales, n.w. of mainland, from which it is separated by Menai Strait, which is crossed by two bridges. Low plateau, monotonous and treeless; copper, lead, marble, asbestos, limestone, potter's clay; Holyhead, port for Ireland. Area, 276 sq. m.; pop. 49,000.

Anglo-Egyptian Sudan. See under **SUDAN**.

Angmagalik, small vil., most northerly important Eskimo settlement, near Arctic Circle, e. coast Greenland.

Ang'mering-on-Sea, garden city,

Sussex, England, 5 m. s. of Arundel. Pop. 1,100.

Angola, or **PORTUGUESE W. AFRICA**, Portuguese colony; bounded by Belgian Congo on n. and n.e., N. Rhodesia on e., Bechuanaland and S.W. Africa on s., and Atlantic on w. Extensive mt. range in n. forming watershed between Atlantic-flowing and Congo-flowing rivers. S. is great plateau (alt. 5,000-6,500 ft., highest peak in Lovile Mts., 7,800 ft.); colony well watered; chief riv. Kwanza (520 m., navigable 200 m. up); interior cool and dry; malarial in low-lying parts. Natural resources chiefly vegetable, but also copper, iron, malachite, petroleum, salt, diamonds, and gold. Exports rubber, bees-wax, oil, palm kernels, palm oil, sugar, maize, coffee, coconuts, and diamonds. Total length of rlys. open, 818 m.; others proposed to link up with Central African Rlys. Loanda, cap.; chief ports: Ambriz, Benguella, Mossamedes, and Lobito. Area, 500,000 sq. m.; pop., chiefly Bantu-Negro, c. 4,000,000.

Angolanland, plateau, central Nyasaland, Africa; average alt. 4,000 ft.; inhabited by pastoral Angoni; few white settlers.

Angora (*äng'go-ra*) (Turkish *Ankara*). (1) Inland vilayet, central Asia Minor, Turkey, 200 m. e.s.e. of Constantinople. Watered by Sakaria, Kizil Irmak, and tribs.; three-fourths under cultivation; wheat, barley, rice, and fruit. Staple export, mohair, silky fleece of white Angora goat (Angora wool); silver and copper mines; hot springs. Pop. 405,000. (2) City in above vilayet, cap. of Turkey since 1924; mohair cloth manufactures; honey, fruit. Pop. 108,000.

Angostura. See **CIUDAD BOLIVAR**. **Angoulême** (*on-goo-lâm'*), cap., dep. Charente, France, on l. bk. of R. Charente; headquarters of cognac trade; paper-making. Pop. 32,000.

Angra do Heroísmo (*ân-grã dô â-rô-ês'mo*), cap., Azores, on s. coast of Terceira I.; exposed harbour; exports wine, cheese, honey, grain, and flax. Pop. 10,000.

Angra Pequena. See **LÜBERITZ**.

Anguilla, or **LITTLE SNAKE I.**, most northerly of Lesser Antilles, Brit. W. Indies; cattle; cotton, phosphates. Area, 35 sq. m.; pop. 4,000.

Angus (formerly **FORFARSHIRE**), maritime and agricultural co., E. Scotland; bounded by Kincardine and Aberdeen on n., North Sea on e., Firth of Tay on s., and Perthshire on w.; high lands in n. separated from Sidlaw Hills by Strathmore; between Sidlaws and Firth of Tay is Carse of Gowrie; cattle and sheep; barley, fruit; flax and jute manufactured. Chief tns.: Dundee, Arbroath, Montrose, Forfar (county town). Area, 873 sq. m.; pop. 270,200.

Anhalt, Free State, Germany, nearly surrounded by Saxony; n. part mainly agricultural; smaller w. part rich in minerals. Beetroot, sugar, brewing, distilling. Cap. Dessau. Area, 888 sq. m.; pop. 351,000.

Anhui, or **NGANHUI**, prov., China; lat. 32° n. cuts it into two parts; s. drained by Yangtze Kiang. Wheat, millet, and beans grown in n.; s. is probably richest rice and tea region of China; large inter-prov. trade; rly. system well developed in the n., but only road and river in s. Cap. Anking. Area, 54,826 sq. m.; pop. c. 20,000,000.

Anjou, former countship, France, now forms most of Maine-et-Loire and part of Mayenne, Sarthe, Indre-et-Loire; cap. was Angers.

An'king, cap., prov. Anhwei, China; on l. bk. Yangtze Kiang; provincial mint. Pop. 40,000.

Anko'ber, tn., prov. Shoa, Abyssinia, formerly cap. of prov.; important caravan centre. Pop. 3,000.

Anko'le, s.w. dist., Uganda Protectorate, Africa; mountainous (5,000 ft.); iron ore; w. fertile and cultivated.

An'naberg, tn., Saxony, Germany, on Erzgebirge (alt. 1,894 ft.), 20 m. s. of Chemnitz. Chief seat of Ger. lace making; haberdashery. Pop. 18,500.

Annabon. See **ANNONON**.

Annam, Fr. protectorate, e. Indo-China, between Tongking and Cochinchina.

China; long narrow dist., area 39,758 sq. m.; mountainous except along coast. Rainy season September to March. People of Mongolian race. Extensive rice-fields on coast; sugarcane near Tourane; silkworms; iron-wood, teak, dyewoods, lacquer on hills; minerals include coal, iron, gold, silver. Tourane Bay is best harbour; cap. Hué. Pop. 5,172,000.

An'nan, royal burgh and port, Dumfriesshire, Scotland, on R. Annan; local industries fishing and tanning. Pop. 3,400.

Annap'olis, cap., Maryland, U.S.A.; excellent harbour; oyster canning. Pop. 11,500.

Annapolis Royal, tn., on arm of Bay of Fundy, Nova Scotia, Canada; formerly cap. of prov. Annapolis valley is famed for its apple orchards. Pop. 1,000.

Ann Ar'bor, city, Michigan, U.S.A., on Huron R., 38 m. w. of Detroit; makes motor lorries, agricultural implements, pianos. Pop. 27,000.

Anney (*an-sè*), chief tn., Haute-Savoie, France, on beautiful Lake of Anney; much frequented in summer; bell foundry; paper mills; textiles. Pop. 15,300.

An'nen, tn., Westphalia, Prussia, 6 m. s.w. of Dortmund; coal mines and foundries. Pop. 18,000.

Ann'field Main, urb. dist., N. Durham, England, 7 m. w. of Chester-le-Street; coal mining. Pop. 15,000.

An'niston, city, N.E. Alabama, U.S.A.; in productive coal and iron dist.; chemical products; cotton goods. Pop. 22,000.

Anniviers (*ā-nē-vyā*), VAL D', beautiful valley, Valais, Switzerland, with head of Zinal Glacier, notable peaks, a deep limestone gorge, and fine waterfalls.

An'nobon, isl., Gulf of Guinea, Africa; belongs to Spain; volcanic mts. Area, 6½ sq. m.; pop. c. 2,000.

Annonay, tn., Ardèche, France, 50 m. s. of Lyons; paper, leather, silk goods. Pop. 13,500.

Ansdell, vil., Lancs, England, 1½ m. w. of Lytham; seaside resort.

Anso'nia, tn., New Haven, Connecticut, U.S.A., 12 m. n.w. of New Haven; clocks, brass and copper goods. Pop. 20,000.

Ans'pach, tn., Bavaria, 25 m. s.w. of Nürnberg; machinery; weaving. Pop. 22,000.

Anstruther. See KILRENNY AND ANSTRUTHER.

Antananarivo (*-rē'vo*), cap., Madagascar, Africa; alt. c. 5,000 ft.; connected by rail with port of Tamatave. Pop. c. 90,000.

Antarctic Regions, area around S. Pole and within Antarctic Circle (66° 30' s. lat.); so far as known include a plateau continent called Antarctica (alt. c. 10,000 ft.; area, over 5,000,000 sq. m.); surrounded by ice barrier, which prevents easy access by sea. Enclosing seas consist of s. portions of Atlantic, Indian, and Pacific Oceans, sometimes termed S. or Antarctic Ocean; the whole region is divided for convenience into four quadrants—Enderby, s. of Africa; Victoria, s. of Australia; Ross, s. of Pacific Ocean; and Weddell, s. of S. America. In each quadrant small parts of coast have been mapped: in Victoria an outline is drawn to within 85° s. lat.; in Weddell a submarine ridge is supposed to link S. America with Graham Land and S. Shetlands by S. Orkneys, Sandwich Group, and S. Georgia. Continent ice-covered, with many glaciers; active volcanoes, e.g. Erebus in Victoria quadrant (alt. 13,300 ft.); coal found; subject to intense cold (lowest temperature recorded, -77° F.) and snow blizzards; rain unknown; no flowering plants or land mammals; penguins, skuas, and snow petrels; whales and seals in surrounding seas. S. Magnetic Pole (72° 25' s., 155° 16' E.) discovered in Shackleton's expedition, 1904; S. Pole reached by Amundsen (Dec. 1911) and Capt. Scott (Jan. 1912); Byrd flew over S. Pole in 1929.

Antequera (*ān-tā-kā'ra*), tn., Spain, 27 m. N. of Malaga; sugar, woollen, tanning, and silk industries. Pop. 32,000.

Antibes (*on-tēb'*), tn. and health resort, French Riviera, 12 m. s.w. of Nice; oranges, olives, and flowers for perfume manufacture. Pop. 13,000.

Anticosti, isl., Gulf of St. Lawrence, Canada, 140 m. by 27½ m.; low-lying and sterile; timber; fishing. Pop. 250.

Antigua (*an-tē'gwa*). (1) Isl. and seat of government, Leeward Islands, Brit. W. Indies. Barbuda and Redonda are dependencies. Suffers from hurricanes; no rivers and few springs, but soil fertile. Staple product sugar; sea-island cotton, limes, onions, and coconuts also grown. Cap. St. John's. Area, 108 sq. m.; pop. 30,000. (2) Tn., Guatemala, 23 m. s.w. of Guatemala city; alt. 5,314 ft.; coffee plantations. Pop. 20,000.

Antilles. See WEST INDIES.

Antioch (modern *Antakīyah*), tn., Syria, on R. Orontes; on main route into Asia, hence early became centre of wealth and luxury; tobacco, olives, maize, cotton; soap and silk manufactures. Pop. c. 30,000.

Antioquia (*ān-tē-ok-ē'a*), inland dep., Colombia, S. America, one of wealthiest and most populous in republic; traversed by Andes; alt. 8,400 ft.; tropical and subtropical products, chiefly maize, coffee, sugar, and fruits; gold and silver; Panama hats are made. Cap. Medellín. Area, 22,752 sq. m.; pop. 824,000.

Antipodes Islands, isolated group of rocky islands, s.e. of Stewart I., New Zealand; uninhabited; so called as being the land nearest antipodes of London (London, 51° 30' N.; 0° 5' W.; Antipodes Is., 49° 41' S.; 178° 43' W.).

Antisana, snow-clad, inactive volcanic peak, Andes, Ecuador, 35 m. E. of Quito (alt. 19,300 ft.).

Anti-Taurus. See TAURUS.

Anti-vari. See BAR.

Antofagasta. (1) Port, N. Chile; exports nitrates, copper, borate of lime, silver, and salt. Pop. 52,000. (2) Largest prov. of Chile; in Atacama Desert; mineral deposits. Area, 46,518 sq. m.; pop. 172,500.

(3,601)

Antrim. (1) Co., N. Ireland. Surface is basaltic plateau, eastern half hilly; numerous peat bogs in s.w.; Lough Neagh in s.w.; Giant's Causeway, remarkable basaltic cliffs, on N. Chief riv., Bann. Climate temperate; produces flax, cereals; cattle, sheep, pigs; iron, rock-salt, bauxite. Industries: linen manufactures, fisheries, distilling. Largest tn., Belfast. Area, 1,098 sq. m.; pop. (excluding Belfast co. bor.) 192,000. (2) Mkt. tn., cap. of above; linen, paper. Pop. 2,000.

Antung, port, Manchuria, at mouth of Yalu riv.; exports silk, beans, and timber. Pop. 72,500.

Antwerp (French *Anvers*). (1) Prov., Belgium; surface level; grain, flax. Area, 1,093 sq. m.; pop. 1,138,000. (2) Fortified city, port, and cap. of above; chief commercial city of Belgium, on R. Schelde; excellent harbour; extensive quays; dry docks. Chief industries: shipbuilding, sugar, textiles, lace, petroleum, tobacco, distilling, diamond cutting; exports: glass, coal, chemicals, iron, steel, cotton, drugs. Pop. 300,000.

Ausin (*ān-zān*), tn., Nord, France, on R. Schelde; suburb of Valenciennes; chief coal-mining centre of France; glass works, machinery. Pop. 15,000.

Aomori, port, extreme N. of Honshu, Japan; salmon, sharks' fins, and variegated lacquer. Pop. 60,000.

Aosta, tn., n.w. Piedmont, Italy; birthplace of Anselm. Pop. 8,500. *Val d'Aosta*, Piedmontese Alpine valley of great beauty.

Aparri, port, Cagayan prov., Luzon, Philippines; only safe port on N. side of island; tobacco. Pop. 21,000.

As'atin, tn., N. Yugoslavia, on R. Danube; manufactures rope, madder, and silk. Pop. 15,000.

Apeldoorn, tn., Gelderland, Holland, 11 m. n.w. of Deventer; manufactures paper. Pop. 57,000.

Apennines, mt. range, Italy, extending s. from Alps through Italy and Sicily; average height c. 4,000 ft.

sinking in the N. to 3,500 ft., and rising in centre to about 7,000 ft. Range is crossed by several rlys. at heights of from 1,500 to 2,000 ft. Rivs. rising in Apennines are Arno, Tiber, etc. Marble is found at Carrara, etc.; lower slopes are heavily forested.

Apenra'de. See AABENRAA.

Ap'ia, seapt., Upolu, Samoan Islands; exports copra and cocoa beans; wireless station. R. L. Stevenson resided (1900-4) at Vailima.

Ap'lerbeck, tn., Westphalia, Prussia, 4 m. S.E. of Dortmund; coal and iron mining, ironfounding. Pop. 11,000.

Apo'da, tn., Germany, 9 m. E.N.E. of Weimar; bell foundries; hosiery; preserved foods. Pop. 25,500.

Appala'chiana, mt. system, U.S.A., extending over 1,500 m. from N. to S. along Atlantic coast; divided by Hudson R., L. Champlain, and Richelieu R. into two unequal groups—Green Mts. and White Mts. to N., Alleghany Mts. and Blue Mts. to S. Highest point, Mount Mitchell (6,711 ft.) in Blue Ridge. Appalachian valley divides system lengthwise in S. Rich in coal, iron, petroleum, and natural gas; forests. Traversed by several railways; easiest through route by Hudson and Mohawk valleys.

Appenzell (ä-pent-zel'), canton, N.E. Switzerland; divided (1597) into two half-cantons—Inner Rhoden (cap. Appenzell), pastoral; and Outer Rhoden (cap. Trogen), industrial. Embroidery, cotton and silk manufactures. Pop. of Inner Rhoden (72 sq. m.), 15,000; of Outer Rhoden (93 sq. m.), 55,500.

Ap'pin, dist. and vil., Argyllshire, Scotland, E. of Loch Linnhe; slate and granite quarries.

Ap'pleby, county tn., Westmorland, England, 13 m. S.E. of Penrith; holiday resort. Pop. 1,600.

Ap'pleton, city, Wisconsin, U.S.A., on Lake Winnebago; paper making. Pop. 25,000.

Aprice'na, tn., Apulia, Italy; marble quarries, 23 m. N. of Foggia; much of dist. is malarial. Pop. 8,000.

Apshe'ron, peninsula, Azerbaijan,

extending into Caspian Sea; petroleum wells.

Apulia (ä-poo'lä), dep., S. Italy; in the N. a plain on which sheep, cattle, and horses are raised; in the S. a limestone plateau where wheat (used in the manufacture of macaroni), barley, maize, and pulses are grown; olive oil, wine, and fruits also products; marble is quarried in Monte Gargano. Chief ports: Brindisi, Bari, and Taranto. Area, 7,376 sq. m.; pop. 2,300,000.

Apure (ä-poo'ri), trib. of Orinoco, Venezuela; joins main river below San Fernando. Navigable for over 600 m.

Apurimac (ä-poo-ri-mäk'), (1) Riv., joining Ucayali, Peru; swift current. (2) Dep., S. Peru; sugar-cane. Area, 8,187 sq. m.; pop. 280,000.

Aqaba (ä-hä-bä'), (1) Gulf forming E. arm of N. end of Red Sea. (2) Tn., near head of gulf.

Aquila or AQUILA DEGLI ABRUZZI (ä'kwäla del'ye äbroo'tsè'), (1) Apennine prov., dep. Abruzzi and Molise, E. Italy; cereals, fruits, flax, and hemp produced. Area, 1,945 sq. m.; pop. 326,000. (2) Cap. of above, 55 m. N.E. of Rome; summer resort; saffron, lace. Pop. 56,000.

Aquitaine (äkw-i-tän'), corrupted later to GUIENNE, old prov., France, between R. Garonne and Pyrenees.

Arabkir', or ARABKIR, tn., Asia Minor, Turkey, 140 m. S.S.E. of Trebizond; fruit, silks and cottons. Pop. 22,000.

Ara'bia, peninsula, S.W. Asia, between Persian Gulf and Gulf of Oman on E. and Red Sea on W.; united to Africa by Isthmus of Suez; length, c. 1,500 m.; average breadth, c. 800 m. Surface plateau with gradual decline from W. to E.; this plateau rises from elevation of 2,500 ft. in N. to over 7,000 ft. in S.W., and is bounded by mt. ranges in S. and W.; between mts. and sea is strip of low fertile land which continues along practically whole of W. coast and about 400 m. along S. coast. N. part of Arabia includes Syrian Desert and Great Nefud

Desert; central Arabia is mainly steppe interspersed with fertile tracts; in w. is Hejaz, in the centre is Nejd. S. Arabia includes Asir and Yemen on w. coast, Hadhramaut and Aden on s. coast, Oman on e. coast. Climate generally is very dry and hot; in plains heat is excessive, in mt. ranges of Yemen and Hadhramaut temperature is more moderate, and in Nejd great cold occurs in winter. Rainy season generally lasts from June till Sept. Simoom, a hot desert wind, blows in n. from interior towards coast.

Divisions.—Hejaz and Nejd (kingdom); Yemen (ruled by an imam); Oman (ruled by sultan); Koweit and Hadhramaut (partly under British influence); Aden and Bahrein (British protectorate).

Arabia has wide stretches of grass, which afford excellent pasture for horses, for which country has long been famed. Large numbers of camels, sheep, goats, and oxen are raised. Vegetable products are dates, coffee, cereals, fruits, spices, drugs, gums, resin, sugar, cotton. Minerals include iron, lead, copper, coal, precious stones. There are few manufactures; coarse linens and woollens made by Bedouin women. Trade is carried on chiefly by caravans, which bring quantities of merchandise both for internal use and to distribute among pilgrims; exports coffee, hides, wool, dates, figs, spices, drugs. Communications are chiefly by sea or caravan, but a railway is laid from Damascus to Medina and surveyed to Mecca and Jidda, and motor transport is employed. Chief seaports: Muscat, on Gulf of Oman; Jidda and Hodeida, on Red Sea; good harbour at Aden, on s. coast. Inhabitants are traditionally of the Arab and Ishmaelitic stocks; former represented by agricultural population round coast, latter by Bedouins of desert and central Arabia. In s. are many Jews. Principal religion is Mohammedanism; every year pilgrimage, or *haj*, is made to holy city, Mecca, by thousands of devotees.

Area, *c.* 1,000,000 sq. m.; pop. *c.* 7,000,000.

Arabian Sea, n.w. portion of Indian Ocean, between India and 'horn' of Africa; branches are Gulf of Oman and Gulf of Aden; includes Socotra I., Kuria Muria Is., and Laccadive Is.

Aracaju (*ar-ak-a-zoo'*), port, Brazil, 170 m. N.N.E. of Bahia; sugar, cloth, soap manufactures; exports cotton, hides and skins, coffee, cacao. Pop. 38,000.

Aracaty, or **ARACATI** (*ā-rā-kā-tē'*), port, N.E. Brazil; hides, cotton, rubber, fruit; regular steamer service with Pernambuco. Pop. 18,000.

Arad (*or'ad*). (1) Tn., Romania, on r. bk. of R. Muresul (Maros); rly. centre; wine trade, corn, tobacco; cattle market. Pop. 79,000. (2) New ARAD, tn., Romania, opposite Arad. Pop. 6,000.

Araru'a Sea, between N. Australia and w. New Guinea; through it are important steamship routes.

Ar'agon, anc. kingdom, Spain; cap. Saragossa; now forms provs. of Huesca, Saragossa, and Teruel; forests on Pyrenees; irrigation works on R. Ebro; coal, iron, and other minerals. Area, 18,300 sq. m.; pop. 1,000,000.

Arago'na, tn., Sicily, 7 m. n. of Girgendi; important sulphur mines; mud volcano of Maccaluba. Pop. 14,000.

Araguaya (*ā-rā-gwā'*), riv., Brazil, trib. of Tocantins; lower course obstructed by rapids. Length, 1,080 m.

Arakan'. (1) Div., Lower Burma; rice, tobacco, timber; cap. Akyab. Area, 18,340 sq. m.; pop. 910,000. (2) Anc. cap. of above; ruins of fort and city wall; unhealthy situation led to decay.

Ar'al, SEA OF, inland sea, Asia; 'sea of islands'; variable level; shallow; fed by rivs. Oxus and Sir Darya; shores uninhabited; sturgeon, carp, herring fishing; drying up.

Aran, group of islands, Galway, w. Ireland; antiquarian and archaeological interest; fishing. Area, 11,579 ac. Chief islands, Inishmore, Inishman, Inisheer.

Aranjuez (*ā-rān-choo-eth'*), tn., prov. Madrid, Spain; spring residence of Span. monarchs; market gardens. Pop. 14,000.

Ar'arat. (1) Double volcanic peak in Armenia (alts. 17,325, 12,840 ft.); peaks above the line of perpetual snow; source of rivs. Araxes and Euphrates; identification of Ararat with peak on which Ark rested (Gen. 8:4) is doubtful. (2) Tn., Ripon co., Victoria, Australia, 130 m. w.n.w. of Melbourne; wool and grain trade; alluvial gold mining; vineyards. Pop. 5,500.

Ar'as, Armenian riv.; rises s. of Erzerum, and flows 600 m. to Caspian Sea.

Arauca'nia, terr., Chile, S. America; now includes provs. of Arauco, Biobio, Malleco, and Cautin; land of Araucanian Indians.

Arau'co, prov. s. Chile; cereals, alfalfa, vegetables, and fruit. Cap. Lebu. Area, 2,189 sq. m.; pop. 60,500.

Aravalli Hills (*ā-rā-vul'lē*), mt. range extending for 300 m. N.E. from Bombay Presidency through Rajputana. Highest peak, Mt. Abu (5,650 ft.).

Arbroath (*ār-brōth'*), old royal burgh and port, Angus, Scotland, 17 m. N.E. of Dundee; good tidal harbour; manufactures coarse linens, boots and shoes. Pop. 17,600.

Arcachon (*ār-kā-shōn'*), health resort, France, 37 m. w.s.w. of Bordeaux; steam fishing fleet; oyster beds. Pop. 12,000.

Arca'dia, dep., Peloponnesus, Greece; basin surrounded by mts.; pastoral; chief tn., Tripolitza. Area, 2,020 sq. m.; pop. 166,000.

Archangel (*ār-kān'jet*). (1) Prov., N. Russia, including Novaya Zemlya, Vaigach, Kolguev Is.; produces timber, hemp, flax, barley, rye; salt, mica, naphtha, lignite; salmon, herring, cod. Drained by Rs. Petchora, Mezen, Dvina, Onega. Katharina Harbour is ice-free. Area, 180,300 sq. m.; pop. 430,000. (2) Port of above; at mouth of riv. N. Dvina; timber; annual fish fair; ice-free May-Nov. Pop. 71,000.

Archipelago (*ār-ki-pel'ag-ō*), (Gr., 'chief sea'), originally the island-studded Aegean Sea; now also applied to any group of islands.

Arcis-sur-Aube (*ār-sē-soor-ōb'*), tn., Aube, France, on R. Aube; hosiery. Pop. 3,000.

Ar'cos de la Frontera, tn., Cadiz, Spain, 20 m. N.E. of Jerez; so called because it stood on frontiers of the old Moorish kingdom of Granada. Pop. 16,000.

Arcot', tn., Madras, India, 65 m. w.s.w. of Madras; taken by Clive (1751). Pop. 11,000.

Arctic Regions, area around N. Pole and within Arctic Circle (66° 30' N. lat.), but better defined as polar area beyond limit of tree growth; includes the Arctic Ocean, practically landlocked by Eurasia, N. America, and Greenland. The Arctic Ocean (area, 5,400,000 sq. m.), which surrounds N. Pole, is deepest in centre (over 2,000 fathoms), but shallow over a wide continental shelf where many islands occur. It communicates with the Atlantic Ocean between Greenland and Norway, where it is known as the Greenland Sea (2,000 fathoms), and between Greenland and Baffin Land by shallow Davis Strait; and with the Pacific Ocean through Bering Strait between Asia and N. America. Principal islands are Spitsbergen, Franz Josef Land, and Novaya Zemlya, which with Norway bound the shallow Barents Sea; to E. of Novaya Zemlya is Kara Sea (100 fathoms); farther E. are New Siberian Islands and Wrangel I.; off N. America is a vast arctic archipelago (Canadian). Arctic Ocean is largely ice-covered; much of it unexplored; salinity low; whale, seal, walrus, and other fisheries, esp. in shallow parts; polar bears. The arctic lands are practically uninhabited except by nomadic Lapps, Samoyedes, and Chukchees of Eurasia and Eskimos of N. America, who live on reindeer, musk-ox, walrus, and other arctic animals and fishes. Within these regions lay the historic routes of search for N.E. and N.W. Passages to

China, Japan, and India; N.E. Passage found by Nordenskiöld, 1879; N.W. Passage discovered by Sir John Franklin, 1845-46, but first traversed by Amundsen, 1906; during search for N.W. Passage Ross discovered N. Magnetic Pole ($70^{\circ} 30'$ N. lat., 97° W. long.), 1831; N. Pole was reported as reached by Peary, 1909; in 1926 Byrd and Amundsen separately flew over the N. Pole.

Ardebil', tn., Azerbaijan, N.W. Persia; warm mineral springs; dried fruits; carpets and rugs. Pop. c. 18,000.

Ardèche', dep., France; occupied by Cévennes Mts.; bounded on E. by R. Rhone; drained by Ardèche R. Olives, vines, mulberries, silk; iron, coal, zinc, and lead. Chief tn., Privas. Pop. 290,000.

Ar'den, FOREST OF, wooded dist., N. Warwickshire; one of the largest of anc. Brit. forests, said to have extended from Severn to Trent.

Ardennes (*âr-dên'*). (1) Hilly dist., France and Belgium; beech and pine forests; agriculture, stock breeding. (2) Dep., N. France; hilly, forest country; crossed by Ardennes Canal joining Rs. Meuse and Aisne; iron, slates, sheep; woollen industry at Sedan. Chief tn., Mézières. Area, 2,028 sq. m.; pop. 297,500.

Ardmore, tn., S. Oklahoma, U.S.A.; cotton, coal mining; oil refineries. Pop. 15,000.

Ardnamur'chan. (1) Par. and vil., Argyllshire, Scotland. Pop. 1,500. (2) Point, most westerly point of mainland of Scotland; lighthouse.

Ard'och, par. and vil., Perthshire, Scotland, 12 m. N.N.E. of Stirling; Roman camp. Pop. 900.

Ardriah'aig, vil., Argyllshire, Scotland, at S. end of Crinan Canal; summer resort. Pop. 1,000.

Ardros'san, port and wat.-pl., Ayrshire, Scotland; exp. coal to Ireland; shipbuilding, engineering. Pop. 6,900.

Ard'sley, urban dist., W. Riding, Yorks, England, 2 m. E. of Barnsley; coal mining and glass manufacture. Pop. 9,200.

Ard'straw, vil. and par., co. Tyrone, N. Ireland, 3 m. N.W. of Newton-Stewart; limestone, freestone, and clay slate. Pop. (par.) 8,100.

Arecibo (*â-râ-sê'bô*), tn. and port, N. coast, Porto Rico, W. Indies; coffee, sugar; exposed, shallow roadstead. Pop. 11,000.

Ar'endal, tn., S. Norway, at mouth of R. Nid; good harbour; timber, wood pulp, aluminium. Pop. 10,300.

Arsop'agus, hill, Athens (Mars Hill); alt. c. 370 ft.

Arequipa (*â-râ-kê'pa*). (1) Dep., S. Peru; silver, copper, cotton, rice, sugar-cane; cattle and sheep breeding. Area, 21,947 sq. m.; est. pop. 360,000. (2) Cap. of above; alt. 7,600 ft.; ores, wools. Pop. 58,000.

Arezzo (*â-ret'sô*). (1) Prov., Italy; cereals, wine. Area, 1,275 sq. m.; pop. 300,000. (2) Tn., cap. of above, 54 m. S.E. of Florence; silk, leather, pottery, and hats. Pop. 58,500.

Argü'o, tn., E. Sebu, Philippines; cocoa, rice, sugar; cotton. Pop. 40,000.

Argentan (*âr-zhôn-tôn'*), tn., Orne, N. France, 22 m. N. of Alençon; gloves, lace, stained glass. Pop. 7,000.

Argenteuil (*âr-zhôn-tû'ê*), suburb of Paris, on E. bk. of Seine; watches and wine. Pop. 44,000.

Argentière (*âr-zhôn-tê-âr'*), COL DE L', one of the S. Alpine passes (6,545 ft.), leading from Barcelonnette in France to Cuneo in Italy.

Ar'gentine Republic (ARGENTINA), federal rep., S. America; length, c. 2,000 m.; width, c. 800 m.; bounded N. by Bolivia, N.E. by Paraguay, E. by Brazil, Uruguay, S. Atlantic, W. by Chile; includes E. part of Tierra del Fuego. Surface slopes gradually from foothills of Andes on W. towards E., and almost whole consists of great plains. Of flat ground, N. part (Gran Chaco) is densely wooded, central pampas portion has great stretches of treeless pasture, and S. portion (Patagonia) contains expanses of stony desert with patches of stunted thorn bush. Drainage of N. and centre is by Paraná-Paraguay R. (with tribs. Pilcomayo,

Bermejo, Salado), and Uruguay, which forms boundary with rep. of Uruguay; farther s. are rivs. Colorado, Negro, Chubut, Chico, and Santa Cruz; in interior numerous streams end in marshes. The Río de la Plata (R. Plate) receives the waters of the rivs. Paraná and Uruguay. Rain-fall over great part of the country is from 30 to 40 in., but diminishes in San Juan to c. 2 in. In n. are forests of hardwood, invaluable for railway sleepers, and quebracho, used in tanning; here are produced tobacco, jute, ramie, sugar, cotton, yerba maté, castor oil, fruits. In Andes regions are magnificent pine forests. In extreme s. seal hunting and ice collecting are carried on. There are many fibre-producing plants. Most economic minerals occur, but await development; oil is found. Agriculture and pasture are chief sources of wealth. Large numbers of sheep and cattle are raised; dairying important. Argentine is second wool-producing country in world. Horses, mules, asses, goats, and pigs also raised in large numbers. Chief crops are wheat, maize, linseed, oats, barley, alfalfa, rye; sugar-cane and fruits also cultivated. Exports, animals, wool, hides, chilled and frozen meat, butter, sugar, wheat, maize, etc. About one-third of import and one-sixth of export trade is with Great Britain. Language is Spanish. Chief tns., Buenos Aires (cap.), Rosario, Córdoba, La Plata, Tucumán. Area, 1,153,119 sq. m.; pop. c. 10,650,000.

Argenton-sur-Creuse (*är-zhon-tön'-süör-kreoz*), tn., Indre, France, 17 m. s. of Châteauroux; manufactures gloves, linen, and lace. Pop. 5,000.

Argonne (*är-gon'*), FOREST OF, plateau of N.E. France, between R. Aisne and its trib. the Aire, is a long low ridge of clay, about 40 m. long and 8 m. wide. No other part of France is so thickly wooded (oak and beech), and in its deep recesses wolves still lurk; crossed by two main roads, and by rly. from w. to e.

Argos, tn., E. Peloponnesus, Greece;

acropolis, anc. theatre; modern town is straggling place. Pop. c. 10,000.

Argosto ^{li}, port, cap. of Cephalonia, Ionian Islands, Greece. Shipbuilding and silk spinning. Exports currants and wine. Pop. 11,500.

Argun (*är-goon'*), riv., forming boundary between Siberia and Manchuria, rises in Great Khingan Mts.; one of headstreams of R. Amur. Length, 440 m.; large portion navigable.

Argyll (*är-gil'*), co., w. Scotland; besides irregularly shaped part of mainland, includes Mull, Iona, Islay, Jura, and many other islands; surface mountainous; highest peak, Ben Cruachan; coast-line deeply indented by arms of sea—Loch Long, Loch Fyne, Loch Linnhe; chief inland lake, Loch Awe; Crinan Canal connects Ardrishaig with Crinan; fine moors and deer forests; Highland cattle bred, sheep largely raised; quarrying, fishing, distilling. Cap. Inveraray; largest tns., Campbeltown, Dunoon, Oban. Area, 3,165 sq. m.; pop. 63,000.

Ariano di Puglia (*är-e-d'no dè pool'ya*), tn., Italy, 47 m. N.E. of Naples; sulphur mines in Apennine Mts. Pop. 8,400.

Arica (*är-i'ka*), tn. and port, Tacna, s. Peru; exports copper and nitrates. Pop. 9,000.

Ariège (*är-i-äzh'*), dep., s. France; extends up n. slope of Pyrenees; forests, cereals, fruit; stock raising; iron, lead, copper, manganese. Chief tn., Foix. Area, 1,892 sq. m.; pop. 167,000.

Arizo ^{na}, state, U.S.A., bounded n. by Nevada and Utah, e. by New Mexico, s. by Mexico, w. by California and Nevada. In N.E. is high plateau, in s.w. low-lying plains; has many short mountain ranges; highest points, Thomas Peak, Ord Peak. Chief rivs. are Colorado (lower part navigable) and its trib. Gila. Climate varies, hottest in s.; rainfall slight; irrigation required. Animals found are the coyote, wildcat, mountain lion. Flora includes cactus, fir, juniper.

Area of forests, about 20 per cent. of surface. Cattle, sheep, and horses raised; chief crops, cotton, wheat, maize; potatoes and apples grow in s., figs, grapes, oranges, lemons in s. Minerals include copper, lead, gold, silver, asbestos, zinc. Industries include copper refining, car construction, timber working, meat packing. Cap. Phoenix. Area, 113,810 sq. m.; pop. 474,000.

Arkansas (*ar'han-saw*), state, U.S.A., bounded n. by Missouri, e. by R. Mississippi, s. by Louisiana, w. by Texas and Oklahoma. Hilly in n.w.; remainder mostly plain. Chief mts. are Boston range in n., Ouachita in s. Through centre flows Arkansas R., other important streams being Ouachita, White, Bartholomew, and Red rvs. Climate is healthy except in e., where swamps cause malaria.

Arkansas is an agricultural state; chief crops, maize, oats, rice, potatoes, hay, forage, cotton, tobacco. In n.w. many fruits are grown, including apples, peaches, grapes. Horses, mules, cattle, sheep, and pigs are raised. Trees include cotton-wood, hickory, red cedar; timber working is an important industry. Coal and petroleum are largely produced; other minerals include bauxite, manganese, lead, natural gas. Industries include cotton ginning, smelting, and printing. Cap. Little Rock. Area, 53,335 sq. m.; pop. 1,944,000.

Arkansas City, tn., Kansas, U.S.A., on Arkansas River, centre of important oil region; flour mills, foundries. Pop. 14,000.

Arkansas River, trib. of R. Mississippi, rises in high mts. of central Colorado. Length over 2,000 m.

Arklow (*ark'lo*), port and mkt. tn., Wicklow, I.F.S., on R. Avoca; explosives. Pop. 4,500.

Ar'berg, pass (5,912 ft.), Austrian Alps, connecting valleys of Rs. Rhine and Inn; carriage road superseded by rly. tunnel (6 m. 650 yds.).

Ar'leodon and Friz'ington, urb. dist., Cumberland, England, 5 m. n.e. of Whitehaven; iron mining. Pop. 4,300.

Aries (*ari*), tn. and riv. port, Bouches-du-Rhône, France, on R. Rhone. Trade in corn, oil, wine; silk spinning. Pop. 16,300.

Ar'madale, tn., W. Lothian, Scotland, 3 m. w. of Bathgate; steel and brick industries. Pop. 4,900.

Armagh (*ar-mā'*). (1) Co., N. Ireland; chief rvs., Bann, Blackwater, Newry, Callan; hilly; potatoes, oats, fruit; linen industry. Area, 512 sq. m.; pop. 110,000. (2) Co. tn. of above; mkt. tn.; linen, leather, distilling industries; cathedral. Pop. 7,400.

Arme'nia, Socialist Soviet Republic, Transcaucasia, U.S.S.R. Bounded n. by Georgia, e. by Azerbaijan, s. and w. by Anatolia and rep. of Nakhichevan. Surface is series of pastoral plateaus from 3,000 to 12,000 ft. above sea-level; highest point, Mt. Ararat (17,325 ft.); drained by Rs. Euphrates, Kur, Aras, Tigris. Climate severe; cold n. winds; valleys have vineyards and orchards, and produce cotton, tobacco, rice, fruits, mulberry trees. Cattle rearing and forestry are important; copper is mined. Cap. Erivan. Area, 12,399 sq. m.; pop. 880,000.

Armentières (*ar-mon-fyār'*), tn., dep. Nord, France, on R. Lys, near the Belgian border; manufactures cloth and linen. Pop. 19,000.

Ar'midale, tn., n.e. New South Wales, Australia; gold, agriculture, and stock raising in vicinity. Pop. 5,800.

Ar'nem, tn., cap. Gelderland, Netherlands, on r. bk. of R. Rhine; important market; woollen goods and tobacco. Pop. 76,000.

Arnhem Land. See NORTHERN TERRITORY.

Ar'no, riv., Italy; rises in Central Apennines; enters Mediterranean (Gulf of Genoa). Length, 140 m.; navigable by barges to Florence.

Ar'nold, urb. dist., Notts, England, 4 m. n. of Nottingham; hosiery, lace; brewing, soap making. Pop. 14,500.

Arns'berg, tn., Westphalia, Prussia,

in R. Ruhr valley; rly. workshops; paper and cellulose. Pop. 11,700.

Arnside, vil., Westmorland, England, on Morecambe Bay, $5\frac{1}{2}$ m. N. of Carnforth; wat.-pl. Pop. 1,700.

Arnstadt (*arn'stat*), tn., Thuringia, Germany, 14 m. S. of Erfurt; chemicals, dyes; saline springs. Pop. 22,000.

Arnsvalde (*arn'sval-de*), tn., Brandenburg, Prussia, 41 m. S.E. of Stettin; machinery, brushes, bricks. Pop. 11,000.

Ar'ran, isl., Firth of Clyde, Scotland; chief vils., Brodick, Lamlash, Corrie, summer resorts; excellent fishing and game; surface mountainous—highest peak, Goatfell (2,877 ft.); rainfall heavy; produces oats, potatoes; exports cattle, fish, sheep, oats. Area, 165 sq. m.; pop. 8,300.

Arras, tn., cap. of dep. Pas-de-Calais, France, on R. Scarpe, 35 m. N.E. of Amiens and 120 m. N. of Paris; one of principal grain markets of France; oil and dye works; hosiery, beer; important rly. jn., and road centre. Scene of important battles during Great War. Pop. 26,000.

Ar'ta. (1) Cap., prov. Artá, Greece; cotton and woollen goods; trade in wine, tobacco, and cattle. Pop. 7,500. (2) GULF OF, arm of Ionian Sea, W. coast of Greece. (3) Tn., Majorca, Balearic Isles; coarse linen; dyeing. Pop. 5,800.

Artemovsk, formerly BAKHMUT, tn., Ukraine, U.S.S.R., 120 m. S.E. of Kharkov; rly. jn.; salt mines and salt springs; coal, iron, alabaster, and quicksilver. Pop. 37,000.

Ar'thur's Seat, hill dominating Edinburgh, of volcanic origin. Alt. 823 ft.

Artois (*ar'twa*), former prov., N.E. France, now forming the greater part of dep. Pas-de-Calais. Artesian wells derive their name from this province. Chief tns., Arras, Bapaume, Béthune, Lens.

Aru Islands (*a-roo*), group of nearly a hundred islands, Dutch E. Indies; heavily forested; bird skins, pearls, and tortoise-shell. Area, 3,244 sq. m.; pop. 18,000.

Ar'undel, munic. bor., Sussex, England, 11 m. E. of Chichester; mkt. tn. Pop. 2,500.

Arzamas, tn., Russia, 70 m. S. of Nijni-Novgorod; timbermilling; tanneries, oil and tallow factories. Pop. 19,000.

Ascension, volcanic isl., S. Atlantic, 700 m. N.W. of St. Helena; $7\frac{1}{2}$ m. by 6 m. Dry, healthy; turtles abound; phosphates and guano. Cap. George Town. Area, 34 sq. m.; pop. c. 300.

Asch (*ash*), tn., Czechoslovakia, in extreme W. of Bohemia; hosiery, dress stuffs, and lace. Pop. 22,000.

Aschaffenburg (*a-shaf'-fen-boorg*), tn., Bavaria, Germany, 26 m. S.E. of Frankfurt-on-Main. Paper and papier-mâché; leather, beer, chemicals. Pop. 34,000.

Aschersleben (*ash-ers-lä'ben*), tn., Saxony, Germany, 32 m. S.W. of Magdeburg; saline spring; chemicals, woollens, hardwares, and sugar. Pop. 29,000.

Ascoli Piceno (*as'kō-lē pē-chā'nō*). (1) Prov., Italy, in the Marches, sloping N.E. from the central Apennines to the Adriatic. Area, 805 sq. m.; pop. 265,200. (2) Tn., cap. of above, on Adriatic coast; majolica and paper. Pop. 36,400.

As'cot or Ascot Heath, racecourse, Berks, England, 6 m. S.W. of Windsor.

Ashanti (*ash-an'tē*), dependency, Gold Coast Colony, W. Africa. Surface covered with forest; cultivated land produces crops of maize, cocoa, coffee, and kola-nuts; gums, dye-woods, and timber are also important. Chief exports are cocoa, gold, and kola. Rubber is produced. The natives manufacture cotton goods, gold and silver work, earthenware. Chief tn., Kumasi. Area, 13,470 sq. m.; pop. 407,000.

Ash'bourne, mkt. tn., Derbyshire, England, 13 m. N.W. of Derby; angling centre; milk condensing; corset factories. Pop. 4,500.

Ash'burton. (1) Mkt. tn., Devon, England, 19 m. S.W. of Exeter; serges; paint factories; sawmills. Pop. 2,500. (2) Riv., W. Australia,

rising in hills w. of the Great Sandy Desert; runs 400 m. to Indian Ocean at Onslow; not navigable.

Ashby-de-la-Zouch (*soosh*), mkt. tn., Leicestershire, England, 21 m. n.w. of Leicester; collieries. Pop. 5,100.

Asheville (*ash'vil*), city, w. N. Carolina, U.S.A.; sanatorium; leather, textiles, furniture. Pop. 50,000.

Ashford, mkt. tn., Kent, England, near R. Stour, 56 m. s.e. of London; breweries, tanneries, locomotive works; agricultural implements. Pop. 15,200.

Ashington, urb. dist., Northumberland, England, 4 m. e. of Morpeth; coal mines. Pop. 29,400.

Ashland. (1) Tn., Wisconsin, U.S.A., on an arm of L. Superior; blast furnaces, iron and steel works; shipping trade. Pop. 11,000. (2) Tn., Kentucky, U.S.A., on R. Ohio; iron and steel, lumber, and leather. Pop. 29,000. (3) Tn., Ohio, U.S.A., 50 m. s.w. of Cleveland; grain trade; agricultural implements; poultry foods; aluminium wares. Pop. 11,000.

Ashgabad (*ash-ka-bad*) tn., Turkmen Rep., U.S.S.R., on Trans-Caspian Rly.; tanneries, cotton and brick factories. Pop. 54,000.

Ashraf, tn., Persia, near s.e. corner of Caspian Sea; silk and cotton goods. Pop. c. 6,000.

Ashstead, vil., Surrey, England, 2 m. s.w. of Epsom. Pop. 3,250.

Ashtabula ('fish river'), city, Ohio, U.S.A., 3 m. from L. Erie and 45 m. e. of Cleveland; ships iron ore and coal; manufactures agricultural implements, iron and steel goods, leather. Pop. 29,000.

Ash-ton-in-Makerfield, urb. dist., Lancs, England, 4 m. s. of Wigan; collieries; locks and tools. Pop. 20,500.

Ash-ton-under-Lyne, parl. and munic. bor., Lancs, England, 6½ m. e. of Manchester, on R. Tame; dyeing, silk and cotton spinning; coal mining; hats, machinery. Pop. 51,600.

Asia, the largest continent; bounded N. by Arctic Ocean, e. by Pacific, (3,601)

s. by Indian Ocean, s.w. by Africa, w. by Europe; greatest length, 5,350 m.; breadth, c. 6,000 m. Coast-line irregular; e. coast fringed by Sea of Okhotsk, with Kamchatka peninsula and Kuril Islands outside; Sea of Japan, with Jap. islands outside; Yellow and E. China Seas, with Luchu Islands outside; s. China Sea, with Philippines and Borneo outside. In s., Bay of Bengal and Arabian Sea are respectively e. and w. of India. E. Indies extend s.e. from mainland.

Relief.—In s.w. of continent is plateau called Pamir, where India, Afghanistan, U.S.S.R., and China meet, and whence great mt. chains run in all directions. Principal mt. system is Himalayas—highest point, Mt. Everest (29,140 ft.); chief range extends s.e. from Pamir to borders of China, there breaking into numerous ranges which traverse Burma and Malay Peninsula; Karakoram Mts. and Kunlun Mts. form the northern flank of system. Tien Shan Mts. extend n.e. from Pamir to Mongolia; further n., Altai and other ranges extend eastwards across N. Mongolia and e. Siberia towards Sea of Okhotsk, forming northern boundary of Desert of Gobi, eastern boundary of which is formed by Khingan Mts. Mt. ranges also extend from Pamir s.w. through India and Afghanistan, and w. towards Caspian Sea. Tableland of Tibet (alt. 10,000–17,000 ft.) lies n. of principal range of Himalayas, to s. of which is Ind. peninsula with tableland of Deccan (1,500–3,000 ft.). In s.w. is tableland of Arabia (2,500–7,000 ft.). Other plateaus are those of Iran, Armenia, and Asia Minor. Principal rvs. are Ob, Yenisei, and Lena in n.; Amur, Hoang-Ho, and Yangtze Kiang in e.; Mekong, Irrawaddy, Brahmaputra, Ganges, Indus in s.; Euphrates and Tigris in s.w.; Sir Darya and Oxus to Sea of Aral. Largest lakes are Caspian Sea (partly in Europe), Sea of Aral, Lake Balkhash, Lake Baikal, and Lob Nor. There are lowlands

along western Caspian-Ob dist.; in Manchuria, China, Siam, Lower Burma; in curve formed by valleys of Ganges and Indus in s. India; and in valleys of Euphrates and Tigris.

Climate varies greatly. Around Verkhoyansk, in n. of e. Siberia, is coldest part of eastern hemisphere. Warmth gradually increases southward, the highest temperatures being experienced in s.w. Asia and India. Winds blow from different quarters, the most interesting and important and regular being the monsoons, which blow from s.e. from Oct. to March, and from s.w. from May to Oct. over s.e. Asia. Rainfall is great where high ground intercepts wet winds, but there are rainless stretches in centre and on plateau from Persia westwards.

Flora.—Vegetation varies according to climate, latitude, and altitude. Dwarf willows and birches occur in *tundra* districts, n. of Arctic Circle, where also mosses and lichens are found. Chief trees are pine, larch, birch in Siberia, coniferous trees on Himalayas, oak, teak, deodar, sandalwood, palm, in India and Malaya. Tropical flowers occur on lower Himalayan slopes, rhododendrons higher up. In Syria and Asia Minor flora is Mediterranean in character. Central Asia produces vines, olive, fig, apple, and other European fruit trees. Japan and China produce ordinary types of vegetation, including varieties of Alpine plants, while in s.e. occur many indigenous plants—sugar-cane, cotton, pepper, areca, sago, banana, and coconut palms growing wild here, as well as many fruit trees and drug- and rubber-producing plants. Bamboos are abundant in China and India. Cultivated plants include tea in Assam, Ceylon, China, Japan; coffee in Arabia, s. India; rice, maize, and cotton in monsoon lands. Date palms abound in oases.

Fauna includes the camel, yak, elephant, tiger, leopard, bear, wolf, Arctic fox, ermine, deer, marmot, monkey, some marsupials (in Malaya), the

crocodile, python, rhinoceros, cheetah; pheasant, ptarmigan, guillemot.

Minerals.—Gold, precious stones, coal, iron; petroleum found in Caucasus, Burma, and Sumatra.

Peoples.—Inhabitants of Asia form over half population of world and belong to five different groups—Mongolian, Caucasian, Malayan, Dravidian, Negroid. Mongolians, numerically greatest, inhabit China, Japan, Tibet, n. Asia; Caucasians predominate in w. from Afghanistan to Asia Minor, and in India; Malaysians in eastern peninsula and Eastern Archipelago; Dravidians in s. India and Ceylon; Negroid peoples in s.e. Asia and Philippine Islands. Other inhabitants are Russians, British, Jews, Arabs. Area, c. 17,000,000 sq. m. Total pop. over 1,000,000,000. See under individual countries.

Asia Minor, or ANATOLIA, western peninsula, Asia, forming part of Turkish rep.; bounded n. by Black Sea, e. by Armenia and Persia, s. by Mediterranean Sea and Syria, w. by Bosphorus, Sea of Marmara, Dardanelles, and Aegean Sea; coast-line broken in w. Central tableland, 3,000–6,000 ft., bounded by mt. ranges n. and s.; has salt lakes. Elsewhere are fertile riv. valleys and waste strips; in s. is Plain of Adana. Climate extreme on plateau, temperate on Mediterranean. Chief rivs., Kizil Irmak, Sakaria. Roads are practically unknown; traffic dependent on horses, camels, mules. Hill slopes of n. are covered with trees—walnut, box, oak, beech, plane, ash. There are many cattle, sheep, goats, horses. Cereals, tobacco, figs, fruits, opium are grown. Mineral wealth is believed to be abundant. Manufactures include silks, cottons, carpets, mohair, wine, soap, liquorice paste, sugar, copper utensils. Among imports are textiles, iron, coal, petroleum; among exports, grain, cotton, dried fruits, wine, oil, hides, mohair, tobacco, meerschaum. Area, 305,090 sq. m.; pop. 13,660,000. See also TURKEY.

Askern, vil., W. Riding, Yorks,

England, 6½ m. N. of Doncaster; medicinal springs. Pop. (par.) 3,730.

Asmar'a, tn., cap. of Eritrea, N.E. Africa; caravan and trading centre; gold mines in vicinity. Pop. 14,700.

Aspa'tria, urb. dist., Cumberland, England, 20 m. S.W. of Carlisle; coal mines in vicinity; agricultural college. Pop. 3,200.

Aspinwall. See COLON.

Aspull, urb. dist., Lancs, England, 3 m. N.E. of Wigan; coal mining; cotton spinning. Pop. 7,200.

Assam', British prov., in extreme N.E. of India. N. part lies along Brahamaputra valley, southern along Surma valley; between these two rivs. lies hill district; chief mts., Himalayas in the N., Assam hills in the S.; large amount of forest ground and fertile land. Mainly agricultural; produces about two-thirds of tea grown in India; rice, jute, and cotton; large deposits of coal; petroleum, iron, and limestone also worked; forests contain rubber trees, sal, and other hardwoods. Exports tea, jute, rice, timber, coal; imports woollen and cotton goods, salt, glass, earthenware, tobacco, opium, betel. Chief tn., Shillong. Area, 61,461 sq. m.; pop. 7,990,000.

Assiniboine, riv. of Canada, trib. of Red Riv., which it joins at Winnipeg.

Assisi (*ā-sē'sē*), tn., Umbria, Italy, 15 m. by rail S.E. of Perugia; birthplace of St. Francis, 1182. Pop. 20,000.

Assiut. See ASYUT.

Assy'ria, anc. country lying N. of Babylonia, now forming part of Iraq; named from Assur, its capital; became one of the most extensive empires of anc. world, comprising Babylonia, W. Media, Armenia, Syria, Palestine, and Egypt. Surface of country is high plain crossed by mts. and drained by R. Tigris and its tribs.

Asternbad'. (1) Prov., N.E. Persia; productive soil, but scanty population; rice, wheat. Area, 5,630 sq. m. (2) Cap. of above, 20 m. from Caspian Sea; trade in carpets, cotton, rice, salt. Pop. 9,000.

Asti, tn., episc. see, Italy, 27 m. S.E. of Turin; silk and famous wine. Pop. 25,000.

Astley Bridge, vil., Lancs, England, 3 m. N. of Bolton; cotton spinning; orphanage. Pop. (dist.) 8,500.

As'ton, former munic. and parl. bor., Warwickshire, England, incorporated (1911) with Birmingham; motor works. Pop. 61,000.

Asto'ria, city, Oregon, U.S.A., on l. bk. of Columbia R.; lumber, flour, and salmon canning. Pop. 16,000.

Astrakhan (*as-tra-han'*). (1) Prov., Russia, U.S.S.R., on Lower Volga. Fertile along R. Volga; cattle, salt, melons, and vegetables. Area, 11,193 sq. m.; pop. 516,700. (2) City, cap. of above, on l. bk. of R. Volga, 50 m. from its mouth; chief Caspian port. Exports: fish, caviare, petroleum, dyed wool of new-born lambs (astrakhan), water melons, wine, grain, salt, textiles. Univ. established, 1919. Pop. 176,000.

Asturias. See OVIEDO (1).

Asuncion (*ā-soon-thē-on'*), cap., Paraguay, S. America; port on Paraguay R.; trades in leather, tobacco, sugar. Pop. 103,800.

Aswan', tn., Upper Egypt, on r. bk. of R. Nile; cap. of prov. of same name; winter health resort and tourist centre; Aswan dam, 3½ m. above tn., pounds Nile waters into vast lake. Pop. 16,500.

Asyut'. (1) Prov., Upper Egypt. Area, 812 sq. m.; pop. 1,079,000. (2) Tn., cap. of prov., near l. bk. of R. Nile. Caravan centre; pottery, ivory work; below tn. is great barrage to regulate supply of irrigation water. Pop. 57,000.

Atacá'ma, prov., Chile, S. America, between Pacific and Argentine Rep. and provs. of Antofagasta and Coquimbo. Desert region in N. Rich in silver and copper, also gold, iron, nickel, salt, saltpetre, nitrates, borax, and guano (exports); cap. Copiapo. Area, 30,699 sq. m.; pop. 48,000.

At'bara, or BLACK NILE, riv., last trib. of R. Nile rising in Abyssinia; brings down highly fertilizing mud and

causes annual floods of Nile. Length, 790 m.

Atchison, city, Kansas, U.S.A., on R. Missouri; flour, live-stock, lumber. Pop. 15,000.

Aterza, tn., Abruzzi, Italy, 24 m. s.e. of Chieti; woollen goods, sausages (*salami*). Pop. 11,000.

Ath (dt), tn., Hainault, Belgium, 18 m. E. of Tournai; iron and copper foundries, linen, lace, cutlery; long famous for annual fête. Pop. 10,400.

Athabasca, (1) Riv., Canada; rises in Alberta, E. of Mt. Hooker; flows N.E. to L. Athabaska after impeded course of 740 m. (2) LAKE, Alberta and Saskatchewan, Canada; area, 3,085 sq. m., having outlet in Slave R.

Athelney, vil. and par., Somerset, England, 9 m. S.E. of Taunton; slight mound in neighbourhood, formerly encircled by marsh, said to be Alfred's place of retreat (879); Alfred's jewel discovered in vicinity (1693).

Athenry, mkt. tn., Galway, I.F.S., 12 m. E. of Galway; cattle fairs. Pop. 800.

Athens, (1) Cap. of Greece, situated on small stretch of flat ground N.W. of Gulf of Ægina, between rivs. Ilissus and Cephissus; $\frac{1}{4}$ m. by rail from its harbour at Piræus. Spinning of coarse cotton yarns, manufacture of coarse cotton cloths; distilling, tanning, and carpet making. Univ. Pop. 453,000. Ancient Athens was built on several low hills rising from Attic plain. Interest of old town lies chiefly in Acropolis, hill in centre of city. Summit was occupied by many of finest buildings of world, some of which are wonderfully preserved. Near centre is Parthenon, chief temple of goddess Athena. (2) City, Georgia, U.S.A., 73 m. N.E. of Atlanta; seat of Univ. of Georgia; cotton goods, cotton-seed oil, lumber. Pop. 21,000.

Atherstone, mkt. tn., N. Warwickshire, England; Bosworth Field is 8 m. to the N.E. Hat factories. Pop. 5,900.

Atherton, tn., Lancs, England, 5 m.

S.S.W. of Bolton; collieries, cotton mills; iron foundries. Pop. 20,000.

Athlone, mkt. tn., Westmeath, I.F.S., on R. Shannon, 78 m. W. of Dublin; agricultural centre; woollen mills; salmon fishery. Pop. 7,500.

Athol, tn., Massachusetts, U.S.A., 25 m. N.W. of Worcester; large boot, shoe, tool, and furniture factories. Pop. 9,600.

Atholl, or **ATHOLE**, dist., N. Perthshire, Scotland, watered by Rs. Tay, Tilt, Tummel, and crossed by Grampian Mts.; glens are of great beauty; deer forests and grouse moors. Area, 450 sq. m.

Athos, peninsula, Macedonian coast, Greece; extends into Ægean Sea; connected with mainland by narrow strip of land; ends in conical peak, Mt. Athos (6,778 ft.); remarkable for religious establishments; monastic rep. since 1060; visited by many pilgrims.

Athy (ath-i'), mkt. tn., Kildare, I.F.S., at junction of Barrow and Grand Canal; bricks and tiles. Pop. 3,500.

Atitlan (a-tē-tlan'), lake, volcano, and tn., Guatemala; lake in crater 24 m. long, 10 m. broad; alt. 4,700 ft.; depth 1,100 ft.; has no apparent outlet. Volcano near S. end, alt. 11,719 ft. Tn. on S. shore of lake; mineral springs; cotton spinning. Pop. 7,700.

Atlanta, cap. of Georgia, U.S.A.; educational centre—Atlanta Univ. (for Negroes); chief commercial centre of S.E. states; cotton and cotton goods, cotton-seed oil, paper, lumber products; agricultural implements; extensive publishing trade. Pop. 361,000.

Atlantic City, coast resort, New Jersey, U.S.A., 55 m. S.E. of Philadelphia; attracts 200,000–300,000 visitors weekly. Permanent pop. 66,000.

Atlantic Ocean, ocean separating Old from New World, Europe and Africa lying to E., N. and S. America to W.; opens northward into Arctic Ocean; spreads out southward into

great Southern Ocean; extreme length c. 8,500 m. along part enclosed by land; greatest breadth, c. 5,000 m.; narrowest part, between Brazil and African coast, 1,800 m. Area, over 31,000,000 sq. m. Deepest point, 90 m. s. of Porto Rico, has depth of 4,662 fathoms. Bed crossed by number of telegraphic cables from e. to w. Relatively saltier than other oceans. Chief commercial highway of world.

Atlas Mountains, irregular series of mountain groups running along n. of Africa from Cape Ghir in Morocco to Cape Bon in Tunisia, distance of 1,500 m. Greatest height between 14,000 and 15,000 ft., is near w. end, s. of city of Morocco. The valleys are fertile and the hills are well forested.

Atrato, riv. Colombia, S. America, flowing into Gulf of Darien; length, 410 m.; navigable for 250 m.

Attica, eastern div. anc. Greece, in form of triangle, one side of which is separated from Boeotia by mts., while other two are washed by Aegean Sea; chief rivs., Ilissus, Cephissus; chief mts., Cithaeron and Parnes ranges. Surface consists of series of plains separated from each other by mountain ridges. Attica produces olives, grapes, figs. Cap. Athens. Area, 2,474 sq. m.; pop. 341,200.

Attleboro, tn., Mass., U.S.A., 31 m. s.w. of Boston; cotton, jewellery, silverware. Pop. 22,000.

Attleborough, par. and tn., Norfolk, England, 16 m. s.w. of Norwich; markets. Pop. (par.) 2,400.

Attock, tn. and fort, Punjab, India, at confluence of Kabul and Indus rivs., 47 m. by rail e. of Peshawar; bridge over Indus; military post; oil wells.

Aubagne (*ô-ban'y*), tn., Bouches-du-Rhône, s. France, 10 m. e. of Marseilles; earthenware. Pop. 6,800.

Aube (*ôb*), dep., Central France; watered by Rs. Seine and Aube; cereals, market produce, timber; horses reared. Chief tn., Troyes. Area, 2,326 sq. m.; pop. 238,200.

Aubenas (*ôb-nâ*), tn., Ardèche, s.

France, on R. Ardèche, 20 m. s.w. of Privas; silk; coal and iron mining in vicinity. Pop. 4,200.

Aubervilliers (*ô-ber-vê-yâ'*), tn., France, on R. Seine; suburb of Paris (N.N.W.); chemicals and perfumery. Pop. 48,000.

Aubin (*ô-bun'*), tn., Aveyron, s. France, 30 m. n.w. of Rodez; coal, iron, marble. Pop. 9,500.

Auburn. (1) Tn., New York, U.S.A., 25 m. s.w. of Syracuse; shoes, woollens; cordage, agricultural implements; printing. Pop. 37,000. (2) Tn., Maine, U.S.A., 32 m. n. of Portland; boots, shoes, moccasins. Pop. 19,000.

Aubusson (*ô-bus-son'*), tn., Creuse, France, 42 m. s.e. of Limoges; carpet and tapestry factories. Pop. 6,000.

Auch (*ôsh*), chief tn., Gers, France, 43 m. w. of Toulouse; thread, cotton, and woollen goods; poultry, wine, brandy. Pop. 9,000.

Auchinleck (*auch-in-lek* or *af-flek'*), par. and vil., Ayrshire, Scotland, 4½ m. s.e. of Mauchline; coal and iron mines. Pop. (par.) 7,200.

Auchterarder (*auch-ter-ar'der*), burgh and mkt. tn., Perthshire, Scotland, 14 m. s.w. of Perth; wool weaving. Pop. 2,300.

Auckland. (1) Provincial dist., North Island, New Zealand; goldfields; kauri gum; coal. Area, 25,364 sq. m.; pop. 425,000. (2) Largest city in New Zealand, cap. of above; two harbours; sawmills, shipbuilding, glass factories, sugar refinery. Univ. Pop. 206,800.

Auckland Islands, volcanic islands, Pacific Ocean, 180 m. s. of New Zealand, to which they belong; well forested; uninhabited. Area, 350 sq. m.

Aude (*ôd*). (1) Riv. s.w. France, enters Mediterranean Sea. Length, 140 m. (2) Maritime dep., France; maize, vines, fruit; slate, marble, salt, iron ore, manganese. Cap. Carcassonne. Area, 2,448 sq. m.; pop. 292,000.

Audenshaw, urb. dist., Lancs, Eng-

land, $5\frac{1}{2}$ m. E. of Manchester; cotton. Pop. 8,300.

Audley, urb. dist., Staffs, England, $4\frac{1}{2}$ m. N.W. of Newcastle-under-Lyme; coal and ironstone. Pop. 13,600.

Aus (*ow's*), tn., Saxony, Germany, 21 m. S.W. of Chemnitz; machinery, metal work. Pop. 21,300.

Augsburg (*awgz'boorg*), cathedral tn., Bavaria, Germany, 35 m. N.W. of Munich; cotton spinning and weaving mills; woollen and paper factories; breweries; chemicals, dye works. Pop. 166,000.

Augusta. (1) City, Georgia, U.S.A., on Savannah R.; winter resort; commercial centre; cotton, cottonseed oil, chemical works, and foundries. Pop. 60,000. (2) Cap., Maine, U.S.A.; manufactures boots, shoes, cotton goods, paper; lumber; printing. Pop. 17,000. (3) Tn. and port, Syracuse, Sicily. Saltworks. Pop. 17,000.

Aumale (*o-mal'*), tn., Seine-Inférieure, France, 37 m. N.E. of Rouen; cloth, leather, and steel. Pop. 2,400.

Aurangabad, tn., Hyderabad, Decan, India, 170 m. N.E. of Bombay; embroidery, silverware, textiles. Pop. 37,000. Area of dist., 6,212 sq. m.; pop. 714,000.

Auray (*o-ray*), tn., Morbihan, N.W. France, 11 m. W. of Vannes; leading centre of oyster culture; dairy produce and fruit. Pop. 6,500.

Aurillac (*o-ré-yak'*), chief tn., Cantal, France; agricultural trade; wooden shoes, umbrellas. Pop. 14,000.

Auro'ra, city, Illinois, U.S.A., 38 m. W. of Chicago; foundries, machine shops, textile factories. Pop. 47,000.

Aussig (*ow'sig*). See **USTI NAD LABEM**.

Austerlitz (*ows'ter-lits*), tn., Moravia, Czechoslovakia, 15 m. S.E. of Brno; scene of Napoleon's victory over Austrians and Russians (1805). Pop. 3,600.

Austin. (1) Cap. of Texas, U.S.A., on r. bk. of Colorado R. Important seat of education; state univ. Flourishing agricultural centre; printing; flour, bricks, furniture. Pop. 53,000. (2) Tn., Minnesota, U.S.A., 90 m. S.

of St. Paul; packing houses, chicken hatcheries. Pop. 12,000.

Australasia, popular term comprising region from Wallace's Line (Lombok I.) to New Zealand, and including Australia, New Guinea, New Britain, and other archipelagos.

Australia, Brit. Dominion, S. hemisphere, bounded N. by Arafura and Timor Seas, E. by S. Pacific, S.W. and N.W. by Indian Ocean; separated from Tasmania by Bass Strait. Coast-line little indented; mts. mostly in E., where they extend from Cape York to Tasmania in Great Dividing Range, known in different places as New England and Liverpool Ranges, Blue Mts., Australian Alps, and Grampians; highest peak, Mt. Townshend (7,350 ft.), Australian Alps; across centre of continent are Coast, Macdonnell, and Flinders Ranges; in S.W. is Darling Range. There are no active volcanoes; there are tablelands on either side of Great Dividing Range, that on W. sloping to great central Upland Plains, which pass into Great Sandy and Victoria Deserts farther W. Lakes are Eyre, Torrens, Gairdner, Amadeus, Frome—all salt lakes—in S. Australia and Central Australia; Austin, Barlea, Cow-cowling, in W. Australia. Principal rivs. are Victoria and Roper, in N. Australia; Flinders, Burdekin, Fitzroy, and Brisbane in Queensland; Hunter in New South Wales; Ashburton, Murchison, and Swan, in W. Australia; S.E. watered by Murray-Darling system, which drains Great Lowland Plain, entering sea on S. coast.

The climate generally is warm and dry; heat greatest in N. Rain in some parts torrential; often there are long droughts, disastrous to stock. In certain areas water from artesian wells is used for live-stock. For climate and production, Dividing Range is important, as it lies directly in path of S.E. Trades, and therefore drains moisture from rain-bearing winds blowing inland, with result that E. coast strip receives too much rain, central and W. dists. too little. The

s.w. strip receives westerly rains in winter. Rainfall is heaviest in n.

Australia has unique fauna, having great number of marsupial animals, among which kangaroos, wombats, and opossums may be mentioned as typical Australian mammals. Platypus and spiny ant-eater are peculiar to the continent. Many parrots occur, and emus, lyre-birds, and black swans are found. Temperate flora has adapted itself to resist drought.

Resources.—Vegetable productions may be divided into (1) tropical and subtropical forest and crops, in n. and part of e. Queensland coast; (2) forests and crops of temperate zone, in e. and s. coasts, except along Bight; (3) mountain forests of temperate zone, along Dividing Range; (4) evergreen bushes, in s.w. and both sides of Spencer Gulf; (5) pasture and scrub, on rest of country except deserts. There are many valuable trees—eucalyptus, blue gum, red gum, iron bark, stringy bark, acacia, cabbage palm, karri, jarrah, kangaroo grass, and salt-bush. Pasture is great source of wealth; sheep and cattle largely raised. Australia is greatest wool-producing country in world, Australian merino wool is longer in staple and heavier than any other; most goes to U.K. Cattle rearing has greatly developed recently, through spread of frozen-meat trade. Rabbits (introduced from Britain) have become a pest. Chief crops are wheat, hay, potatoes, maize, oats, barley. Grapes, bananas, and other fruits, sugar-cane, cotton, and tobacco are grown; wine industry is rapidly growing. Minerals include gold, silver, copper, lead, tin, coal, iron, manganese, antimony, cinnabar, rubies, sapphires. Coal is worked. Bulk of trade is carried on with Brit. Empire. Principal exports are wool, wheat, butter, beef and mutton, skins and hides, sugar and gold.

Communication.—Australia has regular communication with all countries. Rly. mileage is c. 28,000; lines run from Adelaide to Brisbane; from

Brisbane, Rockhampton, and Townsville into interior; and from Perth to Geraldton and Albany. Transcontinental rly. was completed in 1917 from Port Augusta (S. Australia) to link up at Kalgoorlie with W. Australian line. Trans-Australian rly. from n. to s. is under construction. Airway routes are developing rapidly.

Australia consists of six original states, New South Wales, Victoria, Queensland, South Australia, Western Australia, with Northern Territory (now divided into North Australia and Central Australia); and island of Tasmania. Of these, New South Wales is oldest. In 1901 the states were all united in a federation called the Commonwealth of Australia.

The people are mainly British, favouring 'White Australia' policy. Aborigines, numbering c. 60,000, constitute a distinct race, and are sometimes regarded as lowest human family. Cap. Canberra. Area, 2,974,581 sq. m.; pop. 6,263,000.

Austrian Alps, broad plateau, s.e. Austria; part of Great Dividing Range; stretches n.e. from near Melbourne to Canberra; contains Mt. Kosciuszko, highest mt. in Australia.

Austria, inland republic, Europe; bounded n. by Germany and Czechoslovakia, e. by Hungary, s. by Yugoslavia and Italy, w. by Switzerland; divided into provs. of Burgenland, Lower Austria, Upper Austria, Salzburg, Styria, Carinthia, Tyrol, Vorarlberg, Liechtenstein. Surface is mountainous; Lower Austria is flat round Vienna; drained by R. Danube. There are small lakes in s.; mineral springs in s.w. Climate extreme. Animals include wild boar, chamois, bear, wolf, jackal, deer, golden eagles, herons. Much of surface is covered with forests. Austria produces wheat, oats, rye, potatoes, beet, hemp, rape, flax, hops, tobacco; horses, cattle, pigs, and sheep are raised: silkworms and bees are kept. Minerals include coal, lignite, graphite, salt, zinc, silver, iron, lead, quicksilver, copper. Industries include sugar making, manufac-

ture of woollen, linen, silk, and cotton textiles, iron and steel, glass, beer. More than half population is engaged in agricultural pursuits; dairy farming important in Alpine districts; exports timber, furniture, chemicals, sugar, dairy produce; imports wool, cotton, silk, coal, wine, iron goods, rice. Country has over 4,000 m. of rlys. Most important waterways are R. Danube and tribs. Over 90 per cent. of people are German-speaking. Chief tns., Vienna (cap.), Graz, Linz. Area, 32,369 sq. m.; pop. 6,534,000.

Austria, Lower, prov., Austria; part plain; crossed by R. Danube; industries and agriculture; chief city, Vienna. Area, 7,452 sq. m.; pop. 1,480,000.

Austria, Upper, prov., Austria; drained by R. Danube; hilly; forests; salt and mineral springs; chief tn., Linz. Area, 4,626 sq. m.; pop. 876,000.

Austria-Hungary, former empire, Central Europe; territories included Empire of Austria, Kingdom of Hungary, and Provinces of Bosnia and Herzegovina. It was bounded n. by Germany and Russia, e. by Russia and Romania, s. by Romania, Serbia, Montenegro, w. by Germany, Switzerland, Italy.

Autun (*ô-tun*), tn. and episc. see, dep. Saône-et-Loire, France, 43 m. s.w. of Dijon; leather, umbrellas, furniture; brewing. Pop. 11,500.

Auvergne (*ô-vêrn*), former prov., central France, now comprising depts. of Puy-de-Dôme and Cantal and n.w. portion of Haute-Loire.

Auxerre (*ô-sîr*), tn., cap. of Yonne dep., France. It stands in the midst of vineyards, and manufactures bricks, ochre, and iron goods. Pop. 18,500.

Auxonne (*ô-zon* or *ô-son*), fort. tn., Côte d'Or, France, on l. bk. of R. Saône; trade in vegetables and market garden produce. Pop. 3,000.

Av'a, ruined city, Burma, India, on R. Irrawaddy, 10 m. s.w. of Mandalay; former capital.

Avallon (*a-vi-lon*), tn., Yonne, France, 34 m. s.e. of Auxerre; trade

in leather, wine, wood, grain. Pop. 4,800.

Av'alon, peninsula at extreme s.e. of Newfoundland; fishing.

Avatcha (*a-vâ'cha*). (1) Active volcano (1827, 1837, 1855), with double peak, Kamchatka, Asia. (2) See BERING ISLAND.

Avebury (*â-ber-i*) or **ABURY, vil., Wilts, England,** 6 m. w. of Marlborough; anc. large stone circle. Pop. 525.

Aveiro (*a-vê-rô*). (1) Dist., Beira, Portugal; good grazing ground; copper and lead mines. Area, 1,065 sq. m.; pop. 344,200. (2) Port, cap. of above, 35 m. s. of Oporto; sardines, salt, wine, fruit, and oil. Pop. 10,000.

Avellino (*a-vel-ê-no*), tn., Campania, Italy, 30 m. e. of Naples; hazel nuts; manufactures linen, paper, hats. Pop. 30,000.

Aver'nus, small lake near Naples; crater of extinct volcano.

Aver'sa, tn. and episc. see, Caserta, Italy, 10 m. n. of Naples; wine, hemp, cotton, furniture. Pop. 23,000.

Avesnes (*a-vîn*), tn., dep. Nord, France, 24 m. s.e. of Valenciennes; wool-spinning. Pop. 4,600.

Aveyron (*a-vê-ron*), dep., S. France. Chief rivs., Lot, Aveyron, and Tam. Varied soil; potatoes, rye, oats, vines; sheep, cattle; Roquefort cheese; extensive forests; coal, zinc. Chief tn., Rodez. Area, 3,385 sq. m.; pop. 329,000.

Aviemore (*â-ve-môr*), vil., Inverness-shire, Scotland, near R. Spey, 12½ m. s.w. of Grantown-on-Spey; holiday resort. Pop. 650.

Avigliano, tn., Italy, 8 m. n.w. of Potenza; marble. Pop. of comm. 20,000.

Avignon (*a-vên-yon*) ('windy city'), chief tn. Vaucluse, France, on R. Rhône; residence of popes (1309-79); flour, oil, soap, chemicals, leather, madder. Pop. 52,000.

Avila (*â-vê-la*). (1) Prov., Spain, s. of Valladolid; mountainous, centre and s.; merino wool, timber; jasper and marble; lower fertile tracts towards the n.; grain. Area, 3,042 sq.

m.; pop. 215,000. (2) Tn., cap. of above. Pop. 13,000.

Aviles (*á-vê-lâs*), port, Oviedo, N. Spain; fishing; exports coal. Pop. 15,000.

Avionna. See VALONA.

Avo'ca, or OVUCA, riv. and valley, co. Wicklow, I.F.S.; thickly wooded.

Av'ola, tn., prov. Syracuse, Sicily; wine, almonds, sugar. Pop. 16,500.

Avon (*á-von*) ('river'). (1) EAST AVON, rises in Wilts, England; enters Eng. Channel at Christchurch. (2) LOWER AVON, rises in Cotswold Hills, Gloucestershire; flows into Bristol Channel at Avonmouth. (3) UPPER AVON, rises at Naseby, Northants; flows past Stratford; joins Severn below Tewkesbury. (4) Trib. of Clyde, Scotland. (5) Trib. of Spey, Banffshire, Scotland. (6) Trib. of Forth, Scotland.

Avonmouth, tn., Gloucestershire, England, 6 m. n.w. of Bristol; docks; grain, provisions, meat. Pop. 3,000.

Avranche (*av-rânsh'*), tn., s.w. Manche, France; lace, salt, leather dressing; salmon fisheries. Pop. 6,200.

Avre, riv. of Picardy, trib. of Somme, France.

Awaji (*a-wá-jê*), isl., Japan, at E. entrance to Inland Sea; hilly; famous for pottery; tourist centre. Area, 218 sq. m.; pop. 170,000.

Awe (*aw*). (1) Freshwater loch, Argyllshire, Scotland; salmon and trout fishing. (2) Riv. flows from above loch through Pass of Brander to Loch Etive; salmon and sea trout.

Axholme, ISLE OF, dist., n.w. Lincolnshire, England; bounded by rivs. Trent, Idle, and Don; 17 m. long by 9 m. broad; formerly marshy; fertile; celery, flax, and various crops. Pop. 6,800.

Axminster, par. and mkt. tn., s.e. Devon, England; brush making; timber working. Famous carpet industry now transferred to Wilton. Pop. 2,300.

Axum'. See AKSUM.

Ay (*i*), tn., Marne, France, 13 m. s.

of Reims; in centre of Champagne dist. Pop. 7,200.

Aylesbury (*á-ls'ber-e*), mkt. tn., Bucks, England; duck rearing, printing, motor-cars, condensed milk. Pop. 13,400.

Aylesford (*á-ls'ford*), tn., and par., Kent, England, 3 m. n.w. of Maidstone; scene of battle between Britons and Saxons, in which Horsa fell (455). Pop. (par.) 3,100.

Aylesham (*á-ls'ham*), tn., Kent, England; on coalfield n. of Dover. Pop. 2,000.

Ayr (*áir*), royal burgh, chief tn. of Ayrshire, Scotland; at mouth of R. Ayr; famous old bridge; associated with poet Burns; cattle markets; chief Scot. horse-racing centre; exports coal, iron; shipbuilding, engineering, sawmills. Pop. 36,800.

Ayrshire (*áir-shír*), co., s.w. Scotland; watered by Rs. Ayr, Stinchar, Doon, Irvine, Girvan; hilly districts in n. and s.; chief lake, Loch Doon; famous for early potatoes, dairy farming, cheese; coalfields, ironworks; fireclay, limestone, and honestone deposits; carpets, tweeds, cottons, chemicals, explosives, leather, tools, fisheries; chief ports, Ayr (chief tn.), Ardrossan, Girvan, Troon, Largs. Area, 1,132 sq. m.; pop. 285,200.

Ayuthia (*a-yoo'thi-a*), tn., Siam, 42 m. n. of Bangkok; great trade in rice. Pop. 12,000.

Azamgarh', tn., United Provinces, India, 52 m. n. of Benares; in fertile dist.; heavy crops of rice and sugarcane. Pop. 15,000.

Azerbaijan (*az-er-bi-jan'*). (1) Mountainous prov., n.w. Persia, w. of Caspian Sea; grain, fruits, tobacco, and saffron; lead, copper, sulphur; cap. Tabriz. Area, 32,000 sq. m.; pop. 1,500,000. (2) Socialist Soviet Republic; stretches along the western shore of Caspian Sea; on n. is Dagestan; to w. are Georgia and Armenia. Industries are agriculture, cattle rearing; oil wells and refineries, salt, fisheries. Cap. Baku. Area, 32,686 sq. m.; pop. 2,313,000.

Azores (*a-sôrz*), three groups of hilly

Islands in Atlantic Ocean belonging to Portugal; about 900 m. w. of Portugal; extend over length of c. 400 m.; of volcanic origin, and have frequently suffered from earthquakes. Hot mineral springs occur. Climate is temperate. Largest isl. is São Miguel (41 by 9½ m.); smallest, Corvo (4½ by 3 m.). Eastern group comprises Santa Maria, São Miguel, Formigas Rocks; central, Terceira, Graciosa, São Jorge, Pico, Fayal; western, Flores, Corvo. Azores produce wine, pineapples, oranges, bananas, grain, pulse, sweet potatoes, tobacco; industries include butter and cheese making, distilling, whale fishing. Best harbour is at Horta, Fayal I. Cap. Angra, in Terceira, 922 sq. m. Pop. 232,000.

As'ov. (1) Tn., N. Caucasian Area, U.S.S.R., on l. bk. of R. Don; fisheries. Pop. 17,500. (2) SEA OF, connected with Black Sea, s. of Russia; very shallow; gradually silting up; valuable fisheries; caviare and isinglass.

Asuaga (*a-thoo-d'ga*), tn., prov. Badajoz, Spain, 54 m. n.w. of Cordoba; woollen goods; live-stock market. Pop. 16,600.

Asuay (*ā-soo-ī'*), southern prov., Ecuador, S. America; cap. Cuenca; agriculture, cattle raising, and manufacture of straw hats. Area, 3,874 sq. m.; pop. 150,000.

Azul (*a-sool'*), tn., prov. Buenos Aires, Argentina; cattle and sheep. Pop. c. 8,000.

B

Ba'albek (anc. *Heliopolis*), tn., Lebanon, Syria, 40 m. e. of Beirut. Formerly a magnificent city; vast Roman remains; attracts tourists. Pop. c. 3,000.

Beaufu. See BATANG.

Babbacombe, eccles. dist. and coastal vil., Devon, England, 1½ m. n.e. of Torquay. Seaside resort. Pop. 2,000.

Bab-el-Mandeb ('Gate of Tears'), strait, 14½ m. wide, uniting Red Sea and Indian Ocean.

Babuyan's, volcanic island group, N. of Philippines. Products: tobacco, rice, maize. Pop. 10,000.

Bab'ylon ('gate of the god,') anc. tn. Iraq, on l. bk. of R. Euphrates, cap. of Babylonian Empire. Its hanging gardens, built in terrace form and supported on arches resting upon other arches, were one of the 'Seven Wonders of the World.'

Babylonia, anc. country of Mesopotamia, lying s. of Assyria; low-lying district; name taken from anc. cap., Babylon. The country is interesting chiefly through its entry into

Bible history, and the antiquities it has yielded.

Bacan (*bā'kow*), tn., Romania, 52 m. s.w. of Jassy; petroleum springs. Pop. c. 28,000.

Baccarat (*bā-kā-rā'*), tn., Meurthe-et-Moselle, France, 30 m. s.e. of Nancy; glass factories. Pop. 7,300.

Bacchiglione (*bā-kēl-yō'nā*), riv., Italy; flowing to Adriatic. Towns on its banks are Padua and Vicenza. Length, 90 m.

Backergunge, or BAKARGANJ, dist. s. Bengal, India, in Ganges delta; three crops of rice annually; betel-nuts. Area, 3,490 sq. m. Pop. 2,624,000.

Back's River. See GREAT FISH RIVER (2).

Bacolod', tn., n.w. coast Negros I., Philippines. Sugar industry; productive fisheries. Pop. 19,000.

Bactria. See BALKH.

Ba'cup, munic. bor. and mkt. tn., E. Lancs, England, 16 m. N. of Manchester; cotton spinning, weaving, corn milling, and ironfounding. Pop. 20,600.

Badajoz (*bā-dā-hōth'*). (1) Prov.,

largest in Spain, bordering on Portugal. Stock raising; cereals, olives. Area, 8,451 sq. m.; pop. 706,000. (2) Cap. of above, on Guadiana R.; old cathedral, ruins of Moorish castle; foodstuffs, woollens, leather, and wax. Pop. 41,000.

Badakhshan, prov., N. Afghanistan, drained by R. Oxus and tribs. Salt, gold, iron, rubies, lapis lazuli. Cap. Faizabad. Area, 8,500 sq. m.; pop. c. 100,000.

Badalo'na, port, N.E. Spain, 6 m. N.E. of Barcelona. Wine and brandy; shipyards, glass, and chemical works. Pop. 29,000.

Baden (*bă'den*). (1) Rep. and component state of Germany, along E. bk. of R. Rhine. Surface in the E. is hilly, with the Odenwald in N., Black Forest in S.; in the W. is part of Rhine valley; extreme S.E. drained by R. Danube; rest drained by Rhine and tribs. Main and Neckar. About half of area is forested. Rhine dist. produces grain, tobacco, hemp, rape, chicory, hops; vines on hills, forests of pine, oak, beech, birch, ash in Black Forest; several districts noted for wine. Minerals include limestone, gypsum, salt, soda; many mineral springs. Manufactures: cottons, ribbons, paper, beet sugar, cigars, clocks, musical instruments, wooden ornaments, toys, chemicals. Chief tns., Mannheim, Karlsruhe, Freiburg, Pforzheim, Heidelberg. Area, 5,819 sq. m.; pop. 2,312,000. (2) Or **BADEN-BADEN**, cap. of above; is a beautifully situated health resort; mineral springs and baths; wood carving. Pop. 26,000. (3) Tn., Aargau, Switzerland, 13 m. N.W. of Zurich; famous for hot mineral springs since Roman times; for three centuries was seat of Swiss federal council; electrical engineering. Pop. 8,300. (4) Or **BADEN BEI WIEN**, spa and tn., Austria, 17 m. S. of Vienna; warm sulphur springs. Pop. 22,000.

Bad'enoeh, extensive mountainous dist., S.E. Inverness-shire, Scotland; traversed by R. Spey; deer forests.

Bad Lands, rough and barren tracts,

western U.S.A. The condition is due to the action of occasional rains and running water upon arid plateaus of soft, poorly cemented rock, e.g., on White, Cheyenne, Lower Yellowstone, and Little Missouri Rivers.

Bad'minton, GREAT, par. and vil., Glos, England, 14 m. N.E. of Bristol; gives name to the game.

Badne'ra, tn., Berar, India, 90 m. W.S.W. of Nagpur; cotton manufactures. Pop. 11,000.

Bad'rinath, peak of Himalayas, United Provinces, India; alt. 23,210 ft.; shrine of Vishnu attracts 50,000 pilgrims annually.

Baena (*bă-ă'na*), tn., Cordoba, Spain, 43 m. N.W. of Granada; horse breeding, linen, olive oil. Pop. 18,000.

Baena (*bă-ă'tha*), tn., Spain, 18 m. N.E. of Jaen; important Moorish city; univ. (1533). Pop. 15,000.

Baffin Bay, sea, W. of Greenland; whale and seal fishery; first explored by Baffin (1616).

Baffin Land, barren island, W. of Baffin Bay, Franklin, Canada; inhabited by a few Eskimos. Area, c. 236,000 sq. m.

Bagamo'yo, port, Tanganyika Terr., Africa, near mouth of navigable R. Ruwu; formerly an important caravan centre and starting-point of exploration. Pop. 5,200.

Baghdad. (1) Vilayet of Iraq (Mesopotamia), in basin of Rs. Euphrates and Tigris; alluvial plain, formerly one of the granaries of the world; dates, bitumen, naphtha, and petroleum; exports wool, carpets, mohair, skins; bituminous coal plentiful. Area, 54,450 sq. m.; pop. 1,360,000. (2) Cap. of Iraq, on R. Tigris, 340 m. from mouth of Shatt-al-Arab; on Baghdad Railway; important centre of air routes; caravan centre and emporium. Silk and other textiles, copper utensils, and leather goods are manufactured. Built on both banks of river (300 yds. wide, crossed by bridge of boats); modern city (eastern section) includes governor's palace, the European consulates, chief bazaars; western section is

principal Persian quarter; city encircled and interspersed with groves and date palms; cosmopolitan pop. Baghdad reached height of its glory under Haroun-al-Raschid (9th cent.). Pop. about 250,000 (Mohammedans, 180,000; Jews, 50,000; Christians, 15,000).

Baghelkhand', Agency of E. Central India; contains twelve states; largest Rewah (13,000 sq. m.); rich in minerals. Cap. Rewah, 72 m. s.w. of Allahabad. Area, 14,323 sq. m.; pop. 1,770,000.

Bagheria (*bā-gā-rē'a*), or **BAGARIA**, tn., Palermo, Sicily; formerly fashionable resort. Pop. 20,000.

Bagillt, eccles. dist. and vil., Flintshire, Wales, on R. Dee; lead working, coal mining; chemicals. Pop. (dist.) 4,000.

Bagir mi, dist., Chad Colony, French Equatorial Africa; plateau (alt. 1,000 ft.) drained by Shari and tribs. Grain, cotton. Area, 25,000 sq. m.; pop. 154,000.

Bagnara (*ban-yā'ra*), tn., Reggio di Calabria, s. Italy; almost destroyed by earthquake (1908); dist. produces good wine. Pop. 11,100.

Bagnères (*ban-yer'*), (1) DE BIGNORRE, tn., on R. Adour, Hautes-Pyrénées, France; one of chief health resorts of France; mineral springs; woollen goods. Pop. 7,300. (2) DE LUCHON, tn., Haute-Garonne, France; hot mineral springs. Pop. 3,700.

Bagni (*ban'yū*), (1) DI LUCCA, tn., Italy, 11 m. n. of Lucca; mineral springs. Pop. 15,000. (2) DI SAN GIULIANO, tn., 5 m. n.e. of Pisa, Italy; anc. mineral springs still used; textiles and soap. Pop. 21,000.

Bagno (*ban'yo*), (1) A RIPOLI, tn., 2 m. e. of Florence, Italy; many fine villas. Pop. 14,000. (2) DI ROMAGNA, tn., Italy, 35 m. e. of Florence; warm mineral springs. Pop. 9,600.

Bahá'mas, or **LUCAYOS**, chain of coral islands, W. Indies, n. of Cuba; belong to Britain; include 29 isls. and 660 islets, about 20 being inhabited. Largest are Andros, Great Abaco, Great Bahama, and Great Inagua I.;

soil fertile. Products: maize, cotton, sisal hemp, pineapples, oranges, lemons, tomatoes, olives; sponges in surrounding seas; principal exports, sponges, tomatoes, sisal fibre. Islands were first land sighted by Columbus on his voyage of discovery; have belonged without interruption to Britain since 1783. Cap. Nassau, New Providence I. Area, 4,404 sq. m.; pop. c. 59,000 (mainly Negroes).

Bahawalpur, Indian state, Punjab, India; level and partly desert; silks, chintzes. Cap. Bahawalpur (pop. 18,000), on R. Sutlej. Area of state, 15,000 sq. m.; pop. 781,000.

Bahia (*ba-ē'a*). (1) Atlantic state of Brazil; occupies middle and n. São Francisco valley. Products: diamonds, sugar, cotton, coffee, cocoa, tobacco. Area, 204,340 sq. m.; pop. 3,859,000. (2) Or SÃO SALVADOR, cap. of above; important port of rep.; cocoa, tobacco, sugar, hides, and piassava (palm) fibre. Pop. 348,000.

Bahia Blanca (*ba-ē'a blank'a*), tn., Buenos Aires prov., Argentina; wool and grain; chief naval port of rep. Pop. 44,100.

Bahrein (*bar-ā'en*) **Islands**, group of islands, Persian Gulf, off Arabian coast. Under Brit. protection; principal island, Bahrein; cap. Manama; pearl fishing; coffee, dates. Pop. 100,000.

Bahr-el-Abiad (*bār-el-ab'yad*), or **WHITE NILE**. See **NILE**.

Bahr-el-Az'raq, or **BLUE NILE**. See **NILE**.

Bahr-el-Ghazāl' ('river of the gazelles'), riv. Sudan, trib. of White Nile; gives name to dist. between Nile on E. and Darfur and Kordofan on N.

Baise (*bī'ā*), tn., Campania, Italy, 10 m. w. of Naples; favourite wat.-pl. of the Romans under late republic and empire.

Baiern, or **BAYERN**, Ger. name of **BAVARIA**.

Baikal (*bī'kāl*), lake, s. Siberia; largest fresh-water lake in Eurasia; area, 13,500 sq. m.; surface about 1,500 ft. above sea-level; average depth 900 ft.; frozen Dec. to May;

surrounded by mts.; Siberian Rly. passes round s. shore; salmon and sturgeon fisheries; discharges by lower Angara R. to Yenisei R.

Baldon, urb. dist., W. Riding, Yorks, England, 4 m. N. of Bradford; worsted weaving; chemical manufactures. Pop. 7,800.

Ballen (*bā-ē-en*) or **BAYLEN**, tn., Andalusia, s. Spain, 22 m. N. of Jaén; galena, glass. Pop. 9,000.

Baireuth. See **BAYREUTH**.

Bairnsdale, port, Victoria, Australia, 150 m. E. of Melbourne; grain, fruit, butter, leather; goldfields in vicinity. Pop. 3,400.

Baja (*bā'yā*), tn., s. Hungary, on Danube; fruit, grain, hogs; alcohol. Pop. 20,000.

Bajaur, terr., N.W. Frontier Province, India; chief tn., Nawagai, 50 m. N.W. of Peshawar. Area, c. 900 sq. m.; pop. c. 100,000 (almost entirely Pathans).

Bakarganj. See **BACKERGUNGE**.

Baker, city, Oregon, U.S.A., 240 m. E.S.E. of Portland; mining, wool, livestock, lumber, flour mills. Pop. 10,000.

Baker, MOUNT, active volcano, N.W. Washington, U.S.A.; height, 10,830 ft.

Baker Islands, coral islands, Pacific, on the equator; guano; under Brit. protection.

Bakersfield, city, California, U.S.A., 100 m. N.W. of Los Angeles; oil refineries, cotton, fruit; commercial air-port. Pop. 26,000.

Bakewell, anc. mkt. tn., Derbyshire, England, 10 m. S.E. of Buxton; chalybeate springs; zinc and marble in vicinity. Pop. 3,000.

Bakhchi-Sarai (*bak-chē-sā-nā's*) ('garden palace'), tn., Crimea, U.S.S.R.; residence of khans (15th cent.-1783); morocco leather, cutlery. Pop. 10,000.

Bakhmut. See **ARTEMOVSK**.

Bakhtigan', or **NIRIZ**, salt lake, Fars, Persia. Area, 400 sq. m.

Bakony Wald (*bak'ony*), forested hills, Hungary, N. of Lake Balaton. Alt. 2,300 ft.

Baku', cap. Azerbaijan, U.S.S.R.,

on Caspian Sea; rich petroleum field; pipe-line to Batumi (560 m.); univ. Pop. 453,000.

Bala', (1) Mkt. tn., Merionethshire, Wales, on Bala L.; flannel. Pop. 1,400. (2) LAKE, largest l. in Wales; 4 m. long by 1 m. wide; expansion of R. Dee.

Balaklav'a, port and health resort, Crimea, U.S.S.R. Scene of famous cavalry charges by Light Brigade and Heavy Brigade (1854).

Balasore. (1) Dist., Bihar and Orissa, India; rice. Area, 2,085 sq. m.; pop. 1,100,000. (2) Chief tn. and port of above. Pop. 17,000.

Balaton Lake, Hungary, largest lake in Central Europe; 50 m. long by from 2 to 7 m. broad; brackish water; abounds in fish.

Balbo'a, tn., Panama Canal zone; port of Panama; navy yard.

Balbriggan, port and mkt. tn., co. Dublin, I.F.S., 18 m. N. of Dublin; cotton, hosiery. Pop. 2,300.

Bal'dock, urb. dist., Herts, England, 4½ m. N.E. of Hitchin; on (Roman) Icknield Way. Pop. 3,200.

Baleare'ic Islands, group of islands off E. coast of Spain (largest, Majorca, Minorca, Iviza, and Formentera); belong to Spain. Minorca was a Brit. possession in 18th cent., but was restored to Spain (1803). The inhabitants were renowned slingers in anc. times. Chief products: swine, fruit, fish. Cap. Palma (Majorca). Area, 1,935 sq. m.; pop. 350,000.

Bali', or **LITTLE JAVA**, Dutch isl., E. of Java; mountainous and volcanic; fertile, well-cultivated; rice, cotton, coffee, copra, tobacco, fruits. Area, 2,100 sq. m.; pop. 960,000.

Baling (*bal-ē-wag*), tn., Luzon, Philippines, 25 m. N.W. of Manila; fibre goods, silk, bamboo hats. Pop. 18,000.

Belize. See **BELIZE**.

Balk'an Peninsula, easterly peninsula, s. Europe, includes Yugoslavia, Albania, Bulgaria, Turkey, and Greece. Rhodope plateau is core of peninsula; it is flanked by folds of Dinaric Alps, and Pindus Mts. on W., Balkans on

E.; valleys fertile. Climate is Mediterranean on coasts, extreme in interior. Chief rivers are Danube and Tiber, Vardar and Maritza; lakes, Scutari and Ochrida. Pop. is very mixed; consequent hostility tends to incessant unrest. Area, c. 203,000 sq. m.; pop. c. 26,000,000.

Balkhash, LAKE. See **BALKHASH.**

Balkh (BACTRIA). (1) Anc. dist. of Bactria or Bactriana, N. Afghanistan, Central Asia; situated between Oxus R. and Hindu-Kush Mts.; fertile patches, but climate unhealthy. (2) Anc. city, S. of upper Oxus R., former cap. of above; at one time the rival of Nineveh and Babylon; is now much decayed in importance; silk.

Balkhash, LAKE, Central Asia, c. 450 m. long and from 30 to 50 m. broad; no apparent outlet, but water fresh.

Ballschulish (bā-lā-hoo'lish), vil. on Loch Leven, Argyllshire, Scotland; slate quarries. Pop. 700.

Ballantrae, par. and vil., Ayrshire, Scotland, at mouth of R. Stinchar; fish-curing. Pop. (par.) 1,300.

Ballarat, city, Victoria, Australia, 70 m. W. of Melbourne; originally a gold-mining centre; 'Welcome Stranger' (largest of all gold nuggets) found here; now more important as agricultural and pastoral market; ironfounding, wool, flour milling; railway centre. Pop. 42,000.

Ballari. See **BELLARY.**

Ball'ater ('town on a sloping hill'), burgh and summer resort, W. Aberdeenshire, Scotland; rly. station for Balmoral. Pop. 1,200.

Ballina, mkt. tn., co. Mayo, I.F.S., on Killala Bay; angling centre; salmon fishing; stuff and coarse linen. Pop. 4,900.

Ballinasloe, mkt. tn., on borders of cos. Galway and Roscommon, I.F.S., on R. Suck; great horse and cattle fair (Oct.). Pop. 5,200.

Ballinrobe, mkt. tn., co. Mayo, I.F.S., near L. Mask; angling centre; 13th cent. abbey (ruins). Pop. 1,300.

Ball'och, vil., Dumbartonshire, Scotland, at S. end of Loch Lomond (pier

for lake steamers); adjoining is Loch Lomond Park, belonging to corporation of Glasgow.

Ballycastle, mkt. tn., co. Antrim, N. Ireland, opposite Rathlin I.; bathing resort; golf links; 5 m. E. is Fair Head. Pop. 2,000.

Ballyclare, mkt. tn., co. Antrim, N. Ireland, 11 m. S.W. of Larne; paper mills, bleaching greens. Pop. 3,400.

Ballymō'na, tn., co. Antrim, N. Ireland, 11 m. N. of Antrim; second of the 'linen' towns of Antrim. Pop. 11,900.

Ballymoney, mkt. tn., co. Antrim, N. Ireland; agricultural centre; linen trade. Pop. 3,200.

Ballymote, mkt. tn., E. Sligo, I.F.S.; agricultural centre; carriage building; remains of monastery (in which *Book of Ballymote* was written before A.D. 1400). Pop. 750.

Ballyshannon, mkt. tn., co. Donegal, I.F.S., on both banks of the Erne; salmon fisheries; near is Bundoran, a rising wat.-pl., and Belleek, famous for pottery. Pop. 2,100.

Balmain, tn., New South Wales, Australia; suburb of Sydney; saw-mills, iron foundries. Pop. 40,000.

Balme (bām), COL DE, pass of Rhone valley between Chamonix and Martigny; height over 7,000 ft.

Balmerino (bal-mer-ē'no), par. and vil., Fife, Scotland, on Firth of Tay; ruined Cistercian abbey.

Balmoral Castle, royal residence, Deeside, Aberdeenshire, Scotland, 9 m. W. of Ballater.

Balquhider (balquid'er), vil. and par., S.W. Perthshire, Scotland, at E. end of Loch Voil; Rob Roy's burial-place.

Balta, chief tn., Moldavian Rep., U.S.S.R., 120 m. N. by rail from Odessa; cattle, horses, grain. Pop. 24,000 (about three-fourths Jews).

Baltic Port, tn., Estonia, at entrance to Gulf of Finland; an ice-free port.

Baltic Provinces, formerly Russian provs., now forming republics of Estonia, Latvia, and Lithuania.

Baltic Sea, inland sea, N. Europe, surrounded by Denmark, Germany.

Lithuania, Latvia, Estonia, Russia, Finland, and Sweden; connected with North Sea by Sound, Great Belt, Little Belt, Cattegat, Skager Rack; in N. is Gulf of Bothnia, in E. Gulfs of Finland and Riga. Principal islands are: Åland Is., belonging to Finland; the Danish is. of Zealand, Fünen, Lolland, and Bornholm; Gottland and Oland, belonging to Sweden. Length, c. 950 m.; greatest width, c. 150 m.; area, c. 170,000 sq. m.; average depth, 20 fathoms; little tide, except at entrance; navigation dangerous; great part frozen in winter. Baltic Sea at Kiel and North Sea at mouth of Elbe were connected by canal (1895).

Bal'timore, city, Maryland, U.S.A., on Chesapeake Bay. Seat of Johns Hopkins Univ., law and medical faculties of Maryland Univ., a coll. for Negroes, and a medical coll.; Johns Hopkins Hospital; only port of great importance in Maryland; exports cereals, flour, cotton, tobacco, copper, meat; industries include fruit and vegetable canning, shipbuilding, manufacture of bricks, clothing, fertilizers, iron, steel. Pop. 806,000.

Baltistan, or **LITTLE TIBET**, dist., Kashmir, India; crossed by Karakoram Mts., which culminate in Mt. Godwin-Austen, over 28,000 ft.; drained by Indus. Cap. Skardo. Pop. c. 50,000.

Baluchistan (*baloochistan*), country, s.w. Asia, between Afghanistan and Arabian Sea. Coast-line extends c. 600 m., but there are no good harbours. Considerable portion is under Brit. control, called *British Baluchistan*, in N.E.; whole is within Brit. sphere of influence. Surface generally consists of dry tablelands, but there are low-lying plains in E. Principal mts. are Sulaiman system in N., Kirthar range in E., Pab Hills in S., Makran coast range in S. Chief rvs.: Nari, Bolan, Badra, in E. Climate has extremes of cold and heat; rainfall slight. Fruits, cereals, and potatoes are grown; camels, horses, oxen, and cows kept. Minerals include coal, iron, lead, asbestos, chromite, salt, but are

little worked. There are few manufactures; needlework, felts, pottery; exports dates. Inhabitants are chiefly of Pathan, Brahmin, and Baluch races; Pathans found in directly administered districts, Brahmins in middle, Baluchi in S. Cap. Kalat. Area, 134,638 sq. m.; pop. 800,000.

Bam, tn., Kerman, Persia, 180 m. N.E. of Bander Abbas; famous citadel; centre of dist. growing dates and henna. Pop. c. 13,000.

Bamangwato, native dist., S. Africa, in E. of Bechuanaland Protectorate; cap. Serowe. Pop. c. 35,000.

Bam'berg, tn., Bavaria, Germany, 35 m. N. of Nürnberg; Romanesque cathedral (1004), contains tomb of founder, Henry II.; manufactures cottons, rope, tobacco; famous market gardens in vicinity. Pop. 50,100.

Bam'bouk, or **BAMBUK**, hilly dist., French Sudan, W. Africa, in R. Senegal basin; cattle raising; gold, iron, ivory, fruits; climate unhealthy. Pop. (est.) 800,000.

Bam'burgh, or **BAMBOROUGH**, coast par. and vil., Northumberland, England, once Saxon royal burgh; popular resort; burial-place of Grace Darling; castle founded c. 547, stands on Whin Sill; restored by Lord Armstrong (1894). Pop. 700.

Bam'ian, mountainous valley (8,500 ft.), Afghanistan, 80 m. N.W. of Kabul; seat of Buddhist worship; two enormous idols (173 and 120 ft. high), carved out of rock which forms N. side of valley.

Bampton, tn., N. Devon, England, 7 m. N. of Tiverton; Exmoor ponies. Pop. 1,400.

Banat ('frontier province'), former dist. Hungary, lying between Rs. Danube, Tisa, and Maros; divided by Peace Conference between Yugoslavia and Romania. Wheat, wine, minerals, silk. Area, 11,260 sq. m.; pop. c. 1,500,000.

Ban'bridge, mkt. tn., co. Down, N. Ireland, on R. Bann. Chief seat of county's linen manufacture; chemicals. Pop. 4,900.

Ban'bury, mkt. tn., N. Oxfordshire,

England; mentioned in Domesday Book; anc. cross, noted in nursery rhyme, destroyed by Puritans (1610); famous cakes; rope, leather. Pop. 14,000.

Banchory (*bank'or-e*), tn., Kincardineshire, Scotland, on R. Dee; sanatorium. Pop. 1,700.

Ban'da. (1) Dist., Allahabad, India; rice. Area, 3,060 sq. m.; pop. 657,000. (2) Cap. of above, 70 m. N. of Cawnpore; cotton market. Pop. 20,000.

Banda Islands, group of islands, Dutch E. Indies. Nutmegs, mace, cloves, cinnamon. Area, 20 sq. m.; pop. 10,000.

Ban'der Ab'baa, or BENDAR ABBAS, tn., port, Kerman, Persia, on Persian Gulf. Chief exports: dates, almonds, raisins, carpets, raw cotton, wool. Pop. c. 8,000.

Ban'der Lin'geh or LINGEH (*lin'je*), tn. and port, Persian Gulf; pearl fisheries; exports dried fruits. Pop. 8,000.

Ban'don. (1) Mkt. tn., co. Cork, I.F.S., on R. Bandon; agricultural centre; brewing, distilling, tanning. Pop. 2,800. (2) Riv., co. Cork, I.F.S., rises in Carberry Mts.; flows into Kinsale harbour. Length, c. 40 m.

Ban'dra, suburb of Bombay, India, on s.w. shore of Salsette I.; connected with Bombay by causeway and bridge; European residential place. Pop. 24,000.

Ban'dung, cap. of Preanger residency, Java, Dutch E. Indies, 75 m. S.E. of Batavia; quinine, and railway rolling stock factories. Pop. 170,000.

Banff (*banf*). (1) Royal and parl. burgh, port and co. tn., mouth of R. Deveron, Banffshire, Scotland; fishing, shipbuilding, brewing and distilling. Pop. 3,500. (2) Tn., Alberta, Canada, on C.P. Rly., 80 m. W. of Calgary; in Rocky Mts. National Park; with grand mountain scenery; summer resort. Pop. 900.

Banffshire, co., N.E. Scotland, between Moray, Inverness, and Aberdeen. Agriculture important; oats,

barley, wheat grown; cattle raised; industries include distilling, fisheries; granite and slate quarried; surface mountainous in S., low-lying in N.; well wooded; drained by Rs. Spey, Deveron, Avon, Fiddich; chief mt., Cairngorm (4,084 ft.). Cap. Banff. Area, c. 631 sq. m.; pop. 54,800.

Bangalore, city, cap. of Mysore, India; consists of native city (2½ sq. m. in area) and Brit. 'assignment' (12½ sq. m.), the latter forming the largest military cantonment in S. India; climate healthy; silks, cottons, carpets; palace of the Maharajah. Pop. 237,500.

Bangkok, cap. and chief port of Siam, on both bks. of R. Menam, 20 m. from Gulf of Siam; covers area of over 10 sq. m. Royal palace contains the famous emerald Buddha; univ. (1917); rice milling (over eighty factories), tea, saw milling, boat building, engineering; chief exports, rice and teak. Pop. 452,000.

Ban'gor. (1) City and port, Carnarvonshire, N. Wales, at N. entrance to Menai Strait; exports slate; cathedral; Univ. College. Pop. 11,000. (2) Par., urban dist., and port, co. Down, N. Ireland, on Belfast Lough; fishing and muslin embroidery; sea-bathing resort. Pop. of urb. dist., 13,300. (3) Tn., Maine, U.S.A., on Penobscot R.; lumber, boots and shoes, clothing, paper mills. Pop. 29,000.

Bangwe'lu, or BENGA, shallow lake formed by head-streams of Congo, Northern Rhodesia; alt. 3,765 ft.; area (much of it marsh), 1,600 sq. m. (doubled during rains); discovered by Livingstone (1868).

Banjaluca (*ban-yá-loo'ka*), tn., Yugoslavia, 90 m. N.W. Sarajevo; tobacco, gunpowder; hot springs. Pop. 18,000.

Banjerma'sin ('saline garden'), tn., cap. of Dutch S. and E. Borneo, on S. coast of Borneo; built on piles; gold dust, coal, wax, rattan, gums, and resins. Pop. c. 70,000.

Bank'a, or BANGKA, isl., Dutch E. Indies; 138 m. long, 62 m. broad;

hilly; important tin mines; fishing. Area, 4,460 sq. m.; pop. 160,000.

Bank'ura. (1) Dist., Burdwan div., Bengal, India; flat and well-watered, but liable to drought and flood; has silk, cotton, and shellac manufactures. Area, 2,621 sq. m.; pop. 1,020,000. (2) Cap. of above, 90 m. N.W. of Calcutta; manufactures silk and cotton. Pop. 25,000.

Bann, riv., N. Ireland, rises in Mourne Mts., and flows through Lough Neagh to the Atlantic; salmon fisheries; length 90 m.

Ban'nockburn, tn., Stirlingshire, Scotland, 2 m. S.E. of Stirling; manufactures tweeds, tartans, and carpets; has coal mines and tanneries. Pop. 4,000. Here Robert the Bruce disastrously defeated English under Edward II. (June 24, 1314), and thus secured independence of Scotland. Traditional Bore Stone marks site.

Ban'stead, vil., Surrey, England, 3 m. E. of Epsom, on N. Downs (alt. c. 520 ft.); centre of hunting. Pop. (par.) 7,350.

Banswar'a, Indian state, s. Rajputana, India; more than half of state is jungle; agriculture is backward. Cap. Banswara, 60 m. S.E. of Udaipur. Area, 1,946 sq. m.; pop. 190,000.

Bant'am, residency, extreme w. of Java, Dutch E. Indies; rice, rubber. Area, 3,053 sq. m.; pop. 918,000.

Ban'try. (1) Port, co. Cork, I.F.S.; tourist resort; fishing. Pop. 2,700. (2) BAY, one of best anchorages in S.W. of Ireland.

Bar (1) or **ANTIVARI** (*an-ti'va-rē*), tn., with port of same name 3 m. distant, Yugoslavia; on Adriatic Sea; tobacco; olive oil; fishing. Pop. 2,000. (2) Tn., w. Ukraine, U.S.S.R., 50 m. N.E. Kamenets Podolskiy; grain; leather dressing, distilling. Pop. 9,400.

Bara Banki. (1) Dist., United Provinces, India; rice, wheat, sugar, opium. Area, 1,758 sq. m.; pop. 1,030,000. (2) Tn. of above, 17 m. S.E. of Lucknow; cotton, sugar. Pop. 3,000.

Barab'a Steppe, immense stoneless

region, Siberia, between Rs. Ob and Irtysh; forests in N.; grain in fertile areas. Area, 100,000 sq. m.

Barasal'do, river port, Biscay, N.E. Spain; iron and steel works. Pop. 27,000.

Baras'o'a, port, N.E. Cuba; exports bananas and coconuts. Pop. 5,200.

Barada. See **ABANA.**

Baras'ov, isl., Alexander Archipelago, Alaska; coal, gold; fur; fishing and canning industries. Pop. 1,400.

Barbace'na, tn., Minas Geraes, Brazil, 130 m. N. of Rio de Janeiro; agriculture, cheese; gold mining. Alt. 3,500 ft. Pop. 6,000.

Barbasco'as, tn., Colombia, S. America, 130 m. N.E. of Quito; gold mining. Pop. 6,000.

Barbados (*bar-bā'dos*), isl., Brit. W. Indies; most E. of W. Indies; mostly of coral formation; extremely fertile; sugar-cane cultivation and sugar manufacture; sugar, molasses, rum, raw cotton exported; invigorating climate; health resort. Cap. is Bridgetown. Area, 166 sq. m.; pop. 168,000.

Bar'bary, former name for region of N. Africa; inhabited by Berbers; includes Morocco, Algeria, Tunisia, Tripoli, and Barca. Barbary pirates were the corsairs of these coasts.

Bar'berton. (1) Dist. and tn., Transvaal, S. Africa, 180 m. E. of Pretoria; goldfields and asbestos mining; cotton, and citrus fruits. White pop. 1,100. (2) Tn., Ohio, U.S.A., 7 m. S.W. of Akron; manufactures motor tyres and matches. Pop. 24,000.

Barbu'da, isl., Leeward group, Brit. W. Indies; dependency of Antigua; coral formation; sea island cotton; cattle, horses, mules, and asses are reared. Area, 62 sq. m.; pop. 900.

Barca. See **BARKA.**

Barcellona (*bar-che-lō'na*), tn., Messina, Sicily; silk industries; sulphur baths. Pop. (comm.) 25,000.

Barcelona (*bar-thā-lō'na*). (1) Maritime prov., N.E. Spain; mts. rich in iron; wine, oil, fruit, cork; woollens, cottons. Area, 2,969 sq. m.; pop.

1,426,000. (2) Cap. of above, on Mediterranean Sea; first commercial centre and second port of Spain; good harbour; univ.; noble cathedral; cotton manufactures and engineering works; soap and glycerine factories; tanneries; chief exports, almonds, olive oil, wines, cork. Pop. 760,000.

Bard'sey ('Bards' I.'), isl., co. Carnarvon, Wales, legendary last retreat of Welsh bards; farming and fishing. Pop. 60.

Barèges (*ba-rèzh*'), vil., Hautes-Pyrénées, France, 13 m. s. of Bagneres-de-Bigorre; summer resort; sulphurous springs; alt. 4,040 ft.

Bareilly (*ba-rè-li*), or **BAREIL**, tn., United Provinces, India; college; manufactures bamboo furniture; military station. Scene of fighting during Mutiny of 1857. Pop. 129,400.

Bar'ents. (1) Isl., Spitsbergen group, in Arctic regions; named after Dutch navigator; highest point, 1,998 ft. (2) SEA, between Spitsbergen and Novaya Zemlya; shallow; pack ice, fogs, in N.; cod, haddock, and plaice fisheries.

Bardur (*bar-fler*), port, bathing resort, France, on Eng. Channel, 16 m. E. of Cherbourg; *White Ship* wrecked outside harbour (1120). Pop. 1,100.

Barfush', tn., Persia; near Caspian Sea; commercial centre; bazaars; cottons, silks, fruits. Pop. 30,000.

Bar Harbor, vil., Maine, U.S.A., on Mt. Desert I.; fashionable summer resort. Pop. 3,700.

Bari. (1) Prov., Apulia, s. Italy; fruit; salt industry; cattle and sheep pasturing. Area, 1,990 sq. m.; pop. 924,000. (2) Port and archiepisc. see, cap. of above; cathedral; iron foundry; olive oil, soap; trade in wine, fruit. Pop. 110,000.

Baring'o. (1) Dist., Kenya, Africa; grain. (2) Lake in dist.; alt. 3,300 ft., 18 m. long, 10 m. wide; first visited by Joseph Thomson (1883).

Barisal, tn., Bengal, India; on Barisal R., 120 m. E. of Calcutta; centre of river trade. Pop. 27,000.

Bar'ka, or **BARCA** (anc. *Cyrenaica*), former Turkish vilayet, N. Africa; annexed by Italy, 1912; now Cyrenaica.

Bar'king, mkt. tn. and urb. dist., Essex, England, E. suburb of London. Norman church; chemical works. Pop. 51,300.

Bar'kly East. (1) Sheep-farming dist., Cape Province, S. Africa, lying due s. of Basutoland. (2) Cap. of above; elevation nearly 6,000 ft. Pop., dist. 8,000; tn. 1,638.

Bar'kly West. (1) Dist., Griqualand W., S. Africa. (2) Cap. of above; diamonds. Pop. 2,000.

Bar-le-Duc, chief tn., Meuse, France; preserves, cotton, hosiery, machinery. Pop. 14,000.

Barlet'ta, port, Bari, s. Italy; good harbour; centre of wine trade. Pop. 50,000.

Bar'men, manufacturing tn., dist. Düsseldorf, Prussia; ribbon weaving, button making, dyeing, calico printing. Pop. 187,000.

Bar'mouth, tn., Merioneth, Wales, on beautiful Mawddach estuary; summer resort and wat.-pl. Pop. 2,500.

Bar'nard Castle, mkt. tn., co. Durham, England; on l. bk. of R. Tees; ruins of Castle Barnard; birthplace of John Balliol; flax thread. Pop. 3,900.

Barnaul (*bar-na-ool*'), tn., Siberia, on R. Ob; butter, bacon, wax, honey; smelting furnaces. Pop. 74,000.

Bar'ona, urb. dist., N. Surrey, England, on R. Thames, 7 m. s.w. of London; was residence of Fielding, Cowley, and Handel. Pop. 42,400.

Bar'net, tn., Herts, England, 10 m. N. of London; residential dist.; part of Greater London; cattle fairs; paper and metal works. Pop. 14,700.

Barnoldswick (*bar-nôld's-wik*'), urb. dist., W. Riding, Yorks, England, 8 m. s.w. of Skipton; cotton manufacture. Pop. 11,900.

Barn'sley, co. bor. and mkt. tn., W. Riding, Yorks, England; coal-fields, iron, steel, glass. Pop. 71,500.

Barn'stapsle, port and par., N. Devon, England, on R. Taw; lace,

gloves, and pottery (Barum ware). Pop. 14,700.

Barn wood, vil., Glos, England, 2 m. E. of Gloucester, of which it is a suburb; on (Roman) Ermine Street; asylums. Pop. (par.) 1,350.

Baroda, (1) Indian state, Gujarat and Kathiawar, Bombay, India; produces food grains, cotton, sugar, tobacco, and opium (state monopoly). Area, 8,099 sq. m.; pop. 2,126,600. (2) Cap. of above state; has many palaces and Hindu temples. Pop. 94,700.

Barotseland, dist., most w. section of N. Rhodesia; inhabited by Bantu race, who make wicker-work. Area, c. 180,000 sq. m.

Barquisimeto, cap., prov. Lara, Venezuela, 150 m. W. of Caracas; wheat, coffee, cocoa, sugar, beans, and fibre. Pop. 23,000.

Barra, isl. and par. including several other islands, Outer Hebrides, Scotland; fisheries. Pop. 2,300.

Barraekpore, tn., Bengal, India, 15 m. N. of Calcutta; military cantonment. Pop. 38,000.

Barranquilla (*bar-an-kä'-ya*), port on R. Magdalena, Colombia, S. America; cotton, coffee, tobacco, bananas. Pop. 81,000.

Barre, tn., Vermont, U.S.A., 6 m. S.E. of Montpelier; numerous granite quarries in vicinity; tombstones, quarry machinery, tools. Pop. 4,000.

Barrhead, tn., Renfrewshire, Scotland, 3½ m. S.E. of Paisley; shawl and calico weaving; iron and brass working; and sanitary appliances. Pop. 12,300.

Barrie, tn. on L. Simcoe, Ontario, Canada; boat building; leather goods, woollens; rly. centre. Pop. 7,000.

Barrier Reef. See GREAT BARRIER REEF.

Barrow, riv., Leinster, I.F.S., joins Suir, forming as its estuary Waterford Harbour. Length, 119 m.

Barrowford, urb. dist., Lancs, England, 5 m. N.N.E. of Burnley; cotton manufacture. Pop. 5,300.

Barrow-in-Furness, co. bor., port, and manufacturing centre, Lancs,

England. Huge steel and iron works, engineering shops, foundries, jute and flax factories, paper and pulp works. Great shipbuilding and naval armament works. Pop. 66,400.

Barry, (1) Port, Glamorgan, S. Wales; important outlet for S. Wales coalfield. Pop. 38,900. (2) Coast par. and vil., Angus, Scotland. Training ground for artillery and Territorial forces. Pop. 4,900.

Bar'sid, tn., Bombay, India, 120 m. E. of Poona; cotton and oil-seeds. Pop. 22,000.

Bar-sur-Aube (*-ôb*), tn., dep. Aube, France, 34 m. E. of Troyes; weaving; wine, brandy. Pop. 4,500.

Bar'ta, or BARTFIELD, tn., Saros, Czechoslovakia, 80 m. S.E. of Cracow; chalybeate waters. Pop. 7,600.

Bar'ton-on-Hum'ber, urb. dist. and mkt. tn., Lincs, England; pottery, bricks, rope, sailcloth. Pop. 6,300.

Bar'ton-on-Sea, vil., s. Hants, England, 5½ m. S.W. of Lymington; holiday resort. Pop. 1,300.

Bar'ton-upon-Ir'well, par. and vil., Lancs, England, 5½ m. W. of Manchester; here the Bridgewater Canal is carried over the Manchester Ship Canal by a large swing-bridge. Pop. 4,000.

Barrvas, par., N. Lewis, Scotland; lochs and streams abound in fish. Area, 152 sq. m.; pop. 7,000.

Bar'well, vil., Leicestershire, England, 2 m. N.E. of Hinckley; boots and shoes. Pop. 3,500.

Basel. See BASLE.

Bashahr, Indian hill-state, Punjab, India, E. of R. Sutlej; under Brit. administration; has valuable forests. Area, 3,820 sq. m.; pop. 100,000.

Ba'shan, extensive region, anc. Palestine, E. of Lake of Galilee; fertile tableland; famous for oak forests and cattle. Alt. 2,000 ft.

Bash'kir Republic, rep. in E. of European Russia. Consists mainly of plateau land and densely wooded slopes of Ural Mts. Gold, copper, coal; agriculture. Chief tn., Ufa. Area, c. 60,000 sq. m.; pop. 2,741,000.

Basilicat'a, dep., s. Italy, including

provs. of Matera and Potenza; fertile in places; malarial coast; grain, vineyards, olive oil. Area, 3,855 sq. m.; pop. 469,000.

Basingstoke, munic. bor. and mkt. tn., N. Hants, England. Agricultural centre; manufactures farming implements. Pop. 13,900.

Basle (*basel*) or **Basel**. (1) Canton in N.W. Switzerland; consists of Rural (agriculture, forest, vineyards) and Urban Basle. Area, 177 sq. m.; pop. 235,000. (2) Frontier tn., cap. of above; divided by R. Rhine into Great (residential and professional) and Little (chemical and ribbon works) Basle; univ.; important river port. Pop. 141,700.

Basque Provinces (*bask*), dist., N.E. Spain, on Bay of Biscay; comprising three provinces, Vizcaya, Guipuzcoa, and Alava; traversed by Pyrenees; iron mining. Area, 2,739 sq. m.; pop. 811,400.

Bas'ra, **BASSORA**, or **BUSSORAH**, tn. and chief port of Iraq, 70 m. up Shatt-al-Arab, at head of Persian Gulf; on Baghdad Rly. and Europe-India air line; famous as place from which Sindbad the Sailor set sail; centre of trade in dates. Pop. 85,000.

Bas Rhin. See **ALSACE-LORRAINE**.

Bas'sa, dist., N. Nigeria; forests, rubber trees; southern part unexplored. Area, c. 7,000 sq. m.; pop. c. 205,000.

Bas'sam, tn. and port, Ivory Coast, French W. Africa; ivory, gold dust, palm oil. Pop. 2,500.

Basan'o, tn., Venetia, Italy, on R. Brenta; wine, olives, asparagus; straw hats, silk; printing and manufacture of majolica. Pop. 10,100.

Bassein (*ba'sin*), tn. and river port, Burma, on R. Bassein; centre for rice trade. Pop. 43,000.

Bas'senthwaite. (1) Lake, Cumberland, England, expansion of R. Derwent, N. of Derwent Water; fishing; length 4 m., breadth $\frac{1}{2}$ m.; alt. 223 ft. (2) Par., on W. of lake, $7\frac{1}{2}$ m. N.W. of Keswick. Pop. 450.

Basses-Alpes (*bas-alp*), dep. S.E.

France; mountainous; good pastures; olive grows in lower valleys; fruits, wine. Chief tn., Digne. Area, 2,697 sq. m.; pop. 88,300.

Basses - Pyrénées (*bas-pē-rā-nē*), dep., S.W. France. Pyrenees occupy southern portion, elevation increasing W. to E.; many passes; extensive forests; N. and E. terr. consists of pastures and fertile valleys; mineral springs; sheep, cattle; maize. Pau (chief tn.) and Biarritz are health resorts. Area, 2,977 sq. m.; pop. 415,000.

Bassora. See **BASRA**.

Bass Rock, THE, volcanic islet, entrance of Firth of Forth, Scotland; 350 ft. high; circumference, 1 m.; area, 7 ac.; served as prison for Covenanters; last Brit. place held by Jacobites against William III. (1691-94); resort of solan goose; lighthouse on S. side.

Bass Strait separates Tasmania from Victoria, Australia; breadth, 140 m.

Bas'tar, Indian state, S. Central Provs., India; high flat plateau; some mountains; dense forests; jungles inhabited by aboriginal tribe; timber, tanning, and dyeing barks. Chief tn., Jagdalpur. Area, 13,062 sq. m.; pop. 464,000.

Basti, tn. and dist., United Provs., India, 110 m. E. of Lucknow; level, well-watered plain producing rice, wheat, barley. Area, 2,792 sq. m.; pop. (dist.) 1,846,000, (tn.) 17,700.

Bastia (*bas-tē'a*), port, N.E. Corsica; fishing; fruit. Pop. 34,000.

Basu'toland, or **LESUTO**, Brit. crown colony, S. Africa; bounded by Orange Free State on N. and W., Cape Prov. on S., Natal on E. and N.E.; surface is part of rugged plateau, c. 5,000 ft. above sea-level, and has mts. crossing it, including Maluti ranges and Drakensberg; principal rivs., Orange, Caledon; healthy climate. Inhabitants are of Bantu stock, majority Basutos proper, with admixture of other tribes. Basutoland is a native reserve. Productions include great quantities of cereals, wool, and mohair; cattle, ponies, and sheep raised

for export. Cap. is Maseru. Area, 11,716 sq. m.; pop. 496,000 (including 1,600 whites).

Batala, tn., Punjab, India, 55 m. N.E. of Lahore; cotton, silk, leather. Pop. 26,000.

Batang, or **BAANFU**, frontier tn., cap. of Si-K'ang div., on border of Tibet; important depot on Lhasa trade route.

Batangas, prov. and port, Luzon, Philippines, 65 m. S. of Manila; sugar, corn; horses, cattle. Prov., area, 1,108 sq. m.; pop. 258,000; tn., 41,000.

Batavia. (1) Residency, Java, Dutch E. Indies; includes some adjacent islands; N. half, flat; S. half, mountainous; soil fertile; rice, coffee, tea, coconuts, rubber. Area, 11,979 sq. m.; pop. 1,224,000. (2) Port, N. coast, Java; cap. and chief commercial city, Dutch E. Indies; mixed population; coffee, rice, sugar, rubber, pepper, tea, quinine. Pop. 290,000. (3) Tn., New York, U.S.A., 32 m. S.W. of Rochester; agricultural machinery. Pop. 16,000.

Bath. (1) Wat.-pl. and largest tn., Somerset, England, 12 m. S.E. of Bristol; on R. Avon; the Roman *Aquæ Solis*; its hot saline and chalybeate springs were known to Romans from 1st cent.; contains Roman baths and other antiquities. Pop. 68,800. (2) Tn., Maine, U.S.A., on Kennebec R., 30 m. N.E. of Portland; shipbuilding, engineering. Pop. 9,000.

Bathgate, tn., W. Lothian, Scotland, 19 m. from Edinburgh; minerals, distilling, engineering. Pop. 10,100.

Bathurst. (1) Tn., New South Wales, Australia, 100 m. N.W. of Sydney; gold, silver; brewing; boots and shoes. Pop. 9,000. (2) Cap., Gambia, W. Africa; groundnuts. Pop. 9,000. (3) Tn., Cape Province, S. Africa, 80 m. N.E. of Port Elizabeth; pineapples, oranges. Pop. (white) 250.

Batuloa, cap. of E. prov., Ceylon; rice and coconuts. Pop. 10,000.

Batley, tn., W. Riding, Yorks, Eng-

land, 8 m. S.W. of Leeds; heavy woollens, shoddy. Pop. 34,600.

Baton Rouge (*bat'on roosh*), city, Louisiana, U.S.A., on R. Mississippi; state cap.; univ.; cotton-seed products, lumber; sugar, and rice mills; oil refining. Pop. 31,000.

Battenberg, tn., Hessen-Nassau, Prussia, on Eder trib. of R. Weser, c. 70 m. E. of Cologne. Battenberg family married into British royal family, and in 1917 gave up its German titles, changing its name to Mounthatten.

Battersea, metropolitan bor., S.W. London; fine park; factories and foundries. Pop. 159,500.

Battle, urb. dist., Sussex, England, formerly Senlac; received name from battle of Hastings (1066). Pop. 3,500.

Battle Creek, city, Michigan, U.S.A., 115 m. W. of Detroit; manufactures health foods; machinery. Pop. 43,000.

Battleford, tn., Saskatchewan, Canada, 77 m. N.W. of Saskatoon; agricultural centre. Pop. 1,300.

Batum, fort. tn. and port in Transcaucasia, U.S.S.R.; on Black Sea, exports oil, raw silk, oil-cake. Pop. 46,000.

Batang, tn., Luzon, Philippines, 5 m. N.W. of Batangas; hats, mats, and baskets of palm fibre. Pop. 28,000.

Ban'chi ('land of slaves'), region N. Nigeria, British W. Africa; the larger portion N.W. to S.E. occupied by belt of highlands; tin mines; plateaus forming S.W. of prov. fertile, and grow grain, cotton, indigo. Pop. c. 1,000,000.

Bautzen (*baut'sen*), tn., Saxony, Germany; on R. Spree; many industries; machinery, woollen goods, leather. Pop. 40,300.

Bavaria, or **BAVERN**, rep. of Germany occupying the E. side of S. Germany. Bavaria has detached portion called Palatinate or Rhenish Bavaria, W. of R. Rhine, N. of Alsace. Surface along boundaries is generally hilly; chief ranges, those

of Alps in s. (highest peak, Zugspitze, 9,700 ft.); Frankenwald, Fichtelgebirge, and Rhöngebirge in n.; Böhmerwald in n.e.; Haardt Mts. in Palatinate. Palatinate is drained by R. Rhine and tribs., s. of Bavaria proper by R. Danube with tribs. Isar and Inn, n. by R. Main; principal lakes Ammer See, Starnberger See, Walchen See. Over half area is cultivated; chief crops are rye, oats, potatoes, wheat; hops, sugar-beet, tobacco, vines; one-sixth of surface under grass; cattle and sheep largely raised, dairy farming carried on; one-third of area under timber—oak, beech, pine; chief forest districts are along Alps, in s., in Franconia and Palatinate. Chief minerals are salt, coal, iron, graphite, lithographic stone; mineral springs abound. Most important manufacture is beer; other industries are pencil making, manufacture of glass, porcelain, sugar, toys, chemicals, jewellery, mathematical instruments. Cap. Munich. Area, 29,334 sq. m.; pop. 7,380,000.

Bawtry, mkt. tn., W.R., Yorks, England, 9 m. s.e. of Doncaster; on (Roman) Ermine Street. Pop. 1,500.

Bay City, tn., Michigan, U.S.A., on Saginaw R.; extensive fisheries; beet-sugar, chicory, cigars, chemicals, cement. Pop. 47,000.

Bayern. See BAVARIA.

Bayeux (*ba-yu'*), tn., Calvados, France, 7 m. from Eng. Channel; cathedral; lace, linen, pottery. Bayeux Tapestry (231 ft. long, 20 in. wide), preserved in Bayeux Museum. Pop. 6,500.

Bay Islands, group in Caribbean Sea, n. of Honduras; ceded by Britain to Honduras, 1859; bananas, pineapples, and coconuts. Pop. 4,000.

Bayonne (*ba-yon'*). (1) Fortified tn., Basses-Pyrénées, France, 4 m. from Bay of Biscay; 13th cent. cathedral; leather, chocolate, hams. Pop. 28,000. (2) City, New Jersey, U.S.A., adjoins Jersey City; chemicals and petroleum refining; copper and nickel articles. Pop. 86,000.

Bayreuth (*bi-royst*), or BAIREUTH, tn.,

Upper Franconia, Bavaria, 45 m. n.e. of Nürnberg; noted musical festivals in Wagner Theatre; woollen, linen, and cotton goods; marble works. Pop. 35,000.

Bayswater, residential dist., London; was source of many springs.

Bayu'da Steppe, vast desert of stony hills and thickets, Anglo-Egyptian Sudan.

Baza (*bal'tha*), tn., Spain, 55 m. n.e. of Granada; agricultural centre; linen, hempen goods, pottery; mineral springs. Pop. 16,000.

Beachley, vil., Gloucestershire, England, 2 m. s.e. of Chepstow; southern extremity of Offa's Dyke; salmon fishing.

Beachy Head, headland, s. coast of Sussex, England; perpendicular chalk cliff, projecting into Eng. Channel, 570 ft. high.

Beaconsfield (*bek'ons-feld*). (1) Tn. and par., Bucks, England; ribbons; residential suburb of London. Pop. 4,800. (2) Suburb, Kimberley, Cape Prov., S. Africa; diamond mines. Pop. 20,300. (3) Tn., Tasmania; centre of richest goldfield in island.

Beaminster (*be'min-ster*), mkt. tn., Dorset, England, 6 m. n. of Bridport; cheese factories. Pop. 1,500.

Bear Lake, GREAT. See GREAT BEAR LAKE.

Bearsden. See KILPATRICK (1).

Be'as. One of the five rivs. of Punjab, India (*Hyphasis* of Greeks); joins R. Sutlej; length, 295 m.

Beath, par., Fife, Scotland. Cowdenbeath (in the par.) is the centre of the largest coalfield in the country. Area, 6,343 ac.; pop. 25,000.

Bea'tock, vil., Dumfriesshire, Scotland; rly. jn. Beattock Summit, on L.M.S. Rly., 1,014 ft. high.

Beauce (*bô's*). (1) Dist., Eure-et-Loir and Loir-et-Cher, France; wheat, clover, sheep. Area, 2,800 sq. m. (2) Dist., Quebec, Canada. Pop. 51,400.

Beaufort (*bô'fort*). (1) Tn., N. Carolina, U.S.A., 17 m. s.w. of Cape Hatteras; summer resort; fisheries. Pop. 3,000. (2) Tn., S. Carolina, U.S.A., 45 m. s.w. of Charleston;

winter resort; fertilizers; lumber; canned vegetables; turtle farms in vicinity. Pop. 4,100.

Beaufort West, tn. and dist., Cape Prov., S. Africa, 339 m. by rail N.W. of Cape Town; health resort; sheep farming. Pop. (dist.) c. 10,000; (tn.) 6,300.

Beaulieu (*bū'li*), par., Hants, England, 6 m. N. of Lymington; abbey (1204). Pop. 800.

Beaulieu (*bū'li*), vil., Inverness-shire, Scotland, at head of Beaulieu Firth; ruined priory; fishing; school of forestry. Pop. 900.

Beaulieu Firth, a division of Moray Firth, S. of Black Isle, Ross-shire.

Beaumaris (*bū-mar'is*), mkt. tn., Anglesey, Wales; ruins of 13th cent. castle; summer resort. Pop. 1,700.

Beaumont (*bū'mont*), city, Texas, U.S.A., on Neches R., 80 m. N.E. of Houston; lumber centre; very rich oilfields. Pop. 57,000.

Beaune (*bōn*), tn., dep. Côte d'Or, France, 23 m. S. of Dijon; famous wines; manufactures cases and agricultural machinery. Pop. 11,000.

Beauvais (*bō-vā*), tn., cap. of Oise, France; fine incomplete Gothic cathedral; Gobelin tapestry; textiles. Pop. 17,000.

Beaver Falls, bor., Pennsylvania, U.S.A., 30 m. N.W. of Pittsburgh; extensive implement manufactures; porcelain, tiles. Pop. 13,000.

Bea'war, tn., Rajputana, India, 33 m. S.W. of Rajputana; important centre of cotton trade; many mills. Pop. 22,000.

Bed'ington and Brom'borough, urb. dist., Cheshire, England, 3 m. S. of Birkenhead; contains model village of Port Sunlight. Pop. 26,700.

Beccles (*bek'ls*), mkt. tn., Suffolk, England, 8 m. W. of Lowestoft; printing works, maltings; agricultural implements. Pop. 6,500.

Bechuanaland (*betch-oo-an'a*), dist., Brit. S. Africa, between Zambezi and Orange Rivs., and between S.W. Africa on the W. and Transvaal on the E. Southern part, as far N. as R. Molopo, was incorporated with

Cape Colony in 1895; rest of district, extending to Victoria Falls on Zambezi, is a protectorate. Surface is part of great central plateau, with elevation of c. 4,000 ft. Produces maize, millet; great herds of cattle. Rainfall scanty; but wells and irrigation might render soil very fertile. Gold occurs in places. Seat of administration of Protectorate is at Mafeking, in Cape Province. Area of Cape part, 51,254 sq. m.; pop. 99,500 (including 15,000 whites). Area of Protectorate, c. 275,000 sq. m.; pop. 153,000.

Beck'enharn, urb. dist., par., and tn., Kent, England, 7 m. S.E. of London; part of Greater London; residential district. Pop. 43,800.

Beckerek, VELIKI (*bech-ke'r-eh, ve-l-i-ki*), formerly NAGY BECSKEK, tn., Yugoslavia, 40 m. N. of Belgrade; extensive trade in grain. Pop. 32,000.

Beddgelert (*beth-ge'ert*), ('Geleert's grave'), par. and vil., Carnarvonshire, Wales, 11 m. S.E. of Carnarvon; tourist summer resort; slate quarries. Scene of traditional story of Llewellyn's dog. Pop. (par.) 1,200.

Beddington and Wallington, urb. dist., Surrey, England, 2 m. W. of Croydon. In Beddington is beautiful anc. church. Pop. 26,200.

Bed'ford. (1) Munic. bor. and co. tn., Beds, England, on R. Ouse; grammar school, founded by Edward VI. (1552); statue and relics of John Bunyan; agricultural implements, engineering, lace. Pop. 40,100. (2) City, Indiana, U.S.A., 70 m. S. by W. of Indianapolis; stone quarries. Pop. 13,000.

Bedfordshire, or **Beds**, co., England, bordering on Huntingdon, Northampton, Buckingham, Hertford, Cambridge; about 36 m. long, 21 broad; mainly consists of fertile clayey plain, undulating and well-wooded, watered by R. Ouse and tribs., and bounded on S. by Dunstable and Luton Downs, continuations of Chiltern Hills. Co. is partly devoted to sheep grazing, partly to market gardening, partly to corn growing; manufactures: agri-

cultural machinery, straw plaiting, pillow lace; produces phosphate of lime and fuller's earth; co. tn., Bedford; ten mkt. tns. Area, 480 sq. m.; pop. 220,500.

Bed'lington, tn., Northumberland, England, on R. Blyth; coal, iron, nails, chains. Pop. 27,300.

Bed'loe's Island, or **LIBERTY ISLAND**, New York harbour, U.S.A.; on it stands Bartholdi's statue of Liberty, presented by France to America.

Beda. See **BEDFORDSHIRE**.

Bedwas and Machen, urb. dist., Monmouthshire, England, 8 m. w. of Newport; collieries; rly. workshops. Pop. 9,200.

Bed'wellty, urb. dist., Monmouthshire, England, 16 m. n.w. of Newport; collieries; ironworks. Pop. 30,100.

Bed'worth, tn., Warwickshire, England, 5 m. n. of Coventry; coal, iron; ribbons, silk. Pop. 12,100.

Bedzin (*ban'jin*), or **BENDOZIN**, tn., Poland, 40 m. w.n.w. of Cracow; iron, coal, and zinc mines. Pop. 42,000.

Beech'worth, tn., Victoria, Australia, 22 m. s.w. of Albury; gold mining, tanning, coach building. Pop. c. 8,000.

Beersheba (*be'er-shē'ba*), vil., Palestine; region mentioned in O.T. as residence of Abraham and site of famous wells; its position in extreme s. of Judah gave rise to phrase 'from Dan to Beersheba'—i.e., all Israel.

Bee'ston, par. and tn., Notts, England, 3 m. s.w. of Nottingham; silk, hosiery, lace, automobiles, cycles. Pop. 16,000.

Behar. See **BIHAR**.

Behe'sra, prov., Lower Egypt, in R. Nile delta; cotton. Cap. Damanhur. Area, 1,639 sq. m.; pop. 977,000.

Beira (*ba'e-ra*). (1) Prov., Portugal; between rivs. Douro and Tagus; crossed by Serra da Estrella; forest; heath with fertile plain; cereals, fruit, sheep farming; olives; salt from coastal lagoons. Area, 9,200 sq. m.; pop. 1,598,000. (2) Dist., Port. E. Africa; rubber and coconut trees. (3) Port, cap. of (2) above; exports

sugar, rubber, cotton, ivory; gateway to Mashonaland; rly. communication with Cape Town via Bulawayo; rly. to the R. Zambezi (1922) serves Nyasaland. Pop. 17,000 (2,100 whites).

Beirut (*bi'root*), port, Syria; silk goods, gold and silver thread; fruits, hides, wool; entrepôt for exports and imports of central Syria. Anc. Phœnician town of Berytus. Pop. 80,000.

Beith (*bēth*), tn., Ayrshire, Scotland, 19 m. s.w. of Glasgow; important coal-mining dist.; linen thread, leather work. Pop. 6,300.

Beja (*ba'zha*). (1) Dist., Alemtejo prov., s. Portugal; grain, fruit; cattle, pigs. Area, 3,958 sq. m.; pop. 200,600. (2) Chief town of above; manufactures pottery, cloth, olive oil. Pop. 10,500.

Békés (*bē'kesh*). (1) Co., Hungary, bordering on Romania. (2) BÉKÉSGYULA, cap. of co.; frontier tn.; cattle, corn, wine. Pop. 27,000. (3) BÉKÉSCSABA (*-chá'bo*), tn., Békés co., Hungary, 10 m. w.n.w. of (2); milling, hemp weaving; important rly. jn. Pop. 43,000. (4) BÉKÉS, tn., Békés co., Hungary, 12 m. n.w. of (2); formerly an imperial free town. Pop. 25,000.

Belem. See **PARÁ** (2).

Belfast, cap. Northern Ireland; port and great commercial centre of Ulster, on Belfast Lough, 12 m. from Irish Sea; headquarters of linen trade in U.K.; great shipbuilding yards. Industries include distilling, brewing, ironfounding, bacon curing, making of rope, sailcloth, aerated waters; harbour very large and safe; Prot. and R.C. cathedrals; univ. Public buildings include magnificent city hall, Parliament buildings, Ulster Hall, free library, museum. Pop. 415,000.

Belfast Lough (*loch*), inlet on east coast of N. Ireland; 12 m. long.

Belfort (*bel-for*). (1) TERRITORY OF, dep., E. France; cereals, potatoes, machinery, brewing. Area, 235 sq. m.; pop. 94,000. (2) Fort, tn. above; important strategical posi-

tion near Swiss frontier; industries include cotton spinning, brewing, wire drawing, locomotives, machinery. Pop. 36,400.

Belgaum (*bel-goum'*). (1) Dist., s. Bombay, India; cereals, rice, cotton. Area, 4,611 sq. m.; pop. 953,000. (2) Tn. in above, 50 m. N.E. of Goa; cotton mills; soap and pottery works. Pop. 48,000.

Belgian Congo. See CONGO, BELGIAN.

Belgium (*bel'jum*), kingdom, Europe, bounded N. by Netherlands, E. by Netherlands, Prussia, and Luxembourg, S. and S.W. by France, N.W. by North Sea; length, c. 170 m.; width, c. 108 m. Surface is flat and low-lying except in S.E., where Ardennes rise to 2,000 ft.; coast districts, in some places below sea-level, protected by sand-dunes and dykes; along Dutch border is marshy tract called Campine, with woodland and good agricultural ground; drained by Rs. Schelde and Meuse (Maas), with tribs.—of former, Lys, Dender, Durme, Rupel; of latter, Sambre and Ourthe. Climate resembles that of S. of England. Rs. Schelde and Maas are navigable; many canals. Forests cover about one-sixth of surface, and about two-thirds are cultivated; chief crops, wheat, rye, oats, barley, potatoes, beet, hemp, flax, tobacco, hops, chicory, madder. Horses are bred; honey is produced, silkworms reared. Minerals include coal, iron, lead, zinc, copper, manganese, E. and S.E. districts being rich in ores. The coalfield, practically co-extensive with industrial region, crosses country from French frontier near Valenciennes to the German frontier near Aix-la-Chapelle. Deposits also exist in Campine. Belgium is pre-eminently a manufacturing country, and has many important industrial towns, while Antwerp is one of the greatest shipping and manufacturing centres in N. Europe. Metal manufactures are valuable and numerous, including machinery, firearms, cannon, wire, gold, silver, tin, brass, and copper (3,601)

goods. Other industries are linens, lace, woollens, carpets, cottons, silk, velvet, hosiery, glass, paper, leather, gloves, sugar, brewing, distilling, fisheries. Chief manufacturing towns besides Antwerp are Liège, Brussels, Ghent. Exports include sugar, glass, cottons, linens, woollens, fruit, flour, oils, coal, coke, grain, chemicals, iron, steel, machinery, diamonds, rubber goods. Brussels, Louvain, Ghent, and Liège have univs. Cap. Brussels. Area, 11,755 sq. m.; pop. 7,466,000.

Belgrade ('white castle') (BEOGRAD), cap. of Yugoslavia; at confluence of Rs. Danube and Sava; has cathedral, royal palace, univ., national museum and library; tobacco, woolen, chocolate factories; brewing, boots, soap, preserved meats. Pop. 250,000.

Belize (*bel-iz'*), cap. and port, Brit. Honduras, Central America; exports mahogany, dyewoods; bananas, coconuts, tortoiseshell, turtles. Pop. 13,000.

Bellagio (*bel-aj'jo*), tn., Italy, on L. Como; summer resort. Pop. 1,100.

Bellahouston, S.W. suburb of Glasgow, in par. of Govan, Lanarkshire, Scotland.

Bellaire, city, Ohio, U.S.A., on Ohio R., 3 m. S. of Wheeling; iron, steel, limestone, farming implements, stoves, glass. Pop. 13,000.

Bellar'y, or BALLARI, (1) Dist., Madras, India, in Deccan, between Hyderabad and Mysore; produces cereals, pulse, cotton, and oil-seeds. Area, 5,710 sq. m.; pop. 862,000. (2) Cap. of above; cotton; military station. Pop. 39,800.

Belleek, par. and vil., N.W. Fermanagh, N. Ireland, on R. Erne; fine porcelain. Pop. 1,300.

Belle-Ile-en-Mer (*bel-ē'ān-mār*), isl., Morbihan, France, in Bay of Biscay; pilchard fisheries. Area, 33 sq. m.; pop. 6,700.

Belle Isle (*bel-īl'*). (1) Rocky isl., off N. coast of Newfoundland; two lighthouses; original home of Newfoundland dog. (2) STRAIT, between

Labrador and Newfoundland; 9 miles wide at narrowest part; navigation dangerous owing to floating ice and fogs.

Belle'ville. (1) City, Illinois, U.S.A., 14 m. S.E. of St. Louis; brewing, iron-founding; manufactures shoes, flour, stoves, hosiery. Pop. 28,000. (2) City and port, on Bay of Quinte, L. Ontario, Canada; mills, foundries, kilns. Pop. 12,000. (3) Tn., New Jersey, U.S.A., suburb of Newark; chemicals, wire cloth, hats. Pop. 27,000.

Bellingham (*bel'in-jam*), city, Washington, U.S.A., on Puget Sound; fine landlocked harbour; tulips and hyacinths; sawmills, paper mills, salmon canneries. Pop. 31,000.

Bellinzona (*bel-in-son-na*), cap. Ticino, Switzerland, 12 m. N.E. of L. Maggiore. Important transit trade with Italy. Pop. 11,600.

Bell Island, isl., Conception Bay, Newfoundland; valuable iron mines.

Bello Horizon'te, cap. Minas Geraes, Brazil, 220 m. N.N.W. of Rio de Janeiro; gold mines in neighbourhood. Pop. 56,000.

Bell Rock, or **INCHCAPE ROCK**, reef off Angus coast, Scotland; entirely submerged to depth of 12-16 ft. at high tide; 2 ac. exposed at ebb; lighthouse built by Robert Stevenson (1807-11).

Bellahill, tn., Lanarkshire, Scotland, 11 m. S.E. of Glasgow; centre of coal mining, steel and iron working. Pop. (including Mossend) 16,700.

Bellu'no, tn. and episc. see, prov. of same name, N. Italy, 50 m. N. of Venice; cathedral; silk mills. Pop. 30,000.

Beloit'. (1) City, Wisconsin, U.S.A., on S. boundary; college; manufactures agricultural machinery, knives, shoes. Pop. 21,000. (2) City, Kansas, U.S.A., on Solomon R., 190 m. W. of Kansas City; flour milling; agricultural produce; live-stock; limestone quarries. Pop. 3,000.

Belf'per, urb. dist. and mkt. tn., Derbyshire, England, 7 m. N. of Derby; seat of cotton trade; engin-

eering and iron works; manufactures hosiery and lace. Pop. 13,000.

Belt, **GREAT**, str. between Zealand and Flöken, Denmark; navigation difficult because of shoals and winter ice. Length, 40 m.; breadth, 10-20 m.

Belt, **LITTLE**, str. between Jutland and Flöken, Denmark. Length, 30 m.; breadth, 1-12 m.

Bem'bridge, vil., Isle of Wight, Hants, England, on E. coast. Pop. (par.) 1,975.

Bená'ras, or **Kasi**, city, United Provinces, India, on R. Ganges; labyrinth of narrow streets; many temples, mosques, shrines, palaces; notable buildings are mosque of Aurangzebe and Golden Temple and old observatory. From remotest ages Benares has been Hindu holy city, and centre of Brahminical learning; annually visited by innumerable pilgrims who come to bathe in sacred river; remarkable river front; burning ghats where cremation is practised; commercial centre, with manufactures of brocade, gold filigree, silver, lacquered toys. Pop. 198,000.

Benbec'ula, isl., Outer Hebrides, Scotland; fishing. Area, 36 sq. m.; pop. 1,300.

Ben Cru'achan, mt., 3,690 ft., Argyllshire, Scotland, between L. Awe and L. Etive; huge granite mass.

Bender. See **TUGHINA**.

Bender Abbas. See **BANDER ABBAS**.

Ben'digo, formerly **SANDHURST**, tn., Victoria, Australia, 75 m. N.N.W. of Melbourne; is a gold-mining centre and manufactures bricks; fruit market. Pop. 34,000.

Bendsin. See **BEDZIN**.

Beneven'to. (1) Mountainous and agricultural prov., Italy. Area, 999 sq. m.; pop. 300,000. (2) Cap. of above, 32 m. N.E. of Naples; Roman triumphal arch (A.D. 115); cathedral (built 12th to 13th cent.); leather, parchment, plated goods. Pop. 34,000.

Bengal', presidency, India; includes deltas of Ganges and Brahmaputra and alluvial plains along their courses;

bounded N. by Sikkim, Bhutan, E. by Assam, Upper Burma, W. by Bihar and Orissa, S. by Bay of Bengal. Heavy rainfall and moist, warm atmosphere make production enormous; mainly rice, but also pulse, jute, opium, sugarcane, oil-seeds, tobacco, tea, cinchona, spices, timber; great mineral wealth—coal, iron, saltpetre; manufactures jute fabrics, gunny bags, cottons, silk, canvas, muslin, and pack-thread; good communications by rail and river. Cap. Calcutta; hot weather cap., Darjeeling. Area, 76,843 sq. m.; pop. 47,000,000.

Bengal, BAY OF, northern extension of Indian Ocean; excellent harbours on E.; length, 1,200 m. N. to S.

Benghá'zi, port, Cyrenaica, N. Africa; exports cereals. Pop. 32,000.

Benguella (*ben-gá'la*), SÃO FELIPE DE, port and cap. of dist. of same name, Port. W. Africa; sulphur, rubber, wax; founded in 1617. Pop. 3,000.

Beni (EL BENI). (1) Dep., N. Bolivia, S. America; rubber, pasture for cattle. Area, 95,354 sq. m.; pop. 26,000. (2) Riv., Bolivia, flows through fertile and mineral-bearing country; joins Mamoré R., feeder of R. Madeira, trib. of Amazon.

Benin'. (1) Dist., W. Africa, part of s. Nigeria; exports large quantities of palm oil, kernels, rubber, mahogany. Area (approx.), 3,750 sq. m.; pop. 84,000. (2) Tn., cap. of above; for long seat of slave trade. Pop. 15,000. (3) Riv., Benin dist., enters Atlantic; navigable to Sapele; length, 70 m. (4) BIGHT OF, div. of Gulf of Guinea.

Beni-Suef (*bé-né-swáf*). (1) Prov., Upper Egypt. Area, 423 sq. m.; pop. 508,000. (2) Tn., cap. of above, on R. Nile, 64 m. S. of Cairo; carpets; has cotton mills and quarries of alabaster. Pop. 40,000.

Ben Law'ers, mt., Perthshire, Scotland, rises from N. shore of Loch Tay. Alt. 3,984 ft.

Ben Le'di, mt., 2,875 ft., s. Perthshire, Scotland; referred to by Scott in *The Lady of the Lake*.

Ben Le'mond, mt., 3,192 ft., N.W.

Stirlingshire, Scotland; on E. side of Loch Lomond; mica, slate, granite, and quartzite.

Ben Macdhuil (*ben mih-doo'e*), ('hill of the black sow'), 4,296 ft., W. Aberdeenshire, Scotland.

Ben Nevis, mt., S.W. Inverness-shire, Scotland, 4,406 ft. high; highest mt. in Brit. Isles; station of Scottish Meteorological Society up to 1904; pierced by tunnel 15 m. long conveying water power from Loch Treig to aluminium works near Fort William.

Ben Rhydding (*rid'ding*), vil., W. Riding, Yorks, England, 1 m. E. of Ilkley; hydropathic (alt. 500 ft.). Pop. 1,500.

Bent'ley with Ark'sey, urb. dist., W. Riding, Yorks, England, on R. Don, 2 m. N. of Doncaster. Pop. 16,500.

Benue (*ben'ue*), principal trib. of R. Niger, W. Africa; length, 800 m.

Ben Venue', mt., 2,393 ft., S.W. Perthshire, Scotland, overlooking Trossachs, at S. end of Loch Katrine.

Ben Voirlach (*vor'lich*), mt., 3,224 ft., s. Perthshire, Scotland, S. of Loch Earn; mentioned in Scott's *Lady of the Lake*.

Ben Wyvis (*wiv'is*), mt., 3,429 ft., E. Ross and Cromarty, Scotland.

Beograd. See BELGRADE.

Berar', dist. central India, united to Central Provs. for purposes of administration; mostly a valley in basin of R. Tapti; chief crop cotton; also millet, wheat, oil-seeds; held on perpetual lease from Nizam of Hyderabad. Area, 18,000 sq. m.; pop. 3,000,000.

Beraun. See BEROUN.

Berber, prov. and tn., Anglo-Egyptian Sudan, E. bk. of R. Nile; commercial centre; cotton. Pop. of prov. 88,000; tn. c. 10,000.

Berbera (*ber-bá'ra*), chief port and tn., Brit. Somaliland, N.E. Africa; annual fair of inland tribes, Oct. till April; exports gums, resin, skins. Pop. 10,000.

Berbice (*ber-bés'*). (1) Riv., Brit. Guiana, S. America, navigable for 50 m. New Amsterdam stands at

its mouth. (2) Dist. drained by above; sugar, timber, tropical fruits. Area, c. 21,000 sq. m.; pop. 60,000.

Berek, wat.-pl., Pas-de-Calais, N. France; fisheries and boat building. Pop. 10,000.

Berdichev (*ber-de-chef*), town, Ukraine, U.S.S.R., 90 m. s.w. of Kiev; tobacco, soap, leather, bricks. Pop. 56,000.

Berdiansk, or **BERDIANSK**, ice-free port, Sea of Azov, Ukraine, U.S.S.R.; exports wheat, barley, hemp, wool, skins. Pop. 26,000.

Berehaven, tn. and roadstead, N. shore of Bantry Bay, I.F.S. Pop. c. 2,000.

Berezina (*bā-res'i-na*), riv., Russia, U.S.S.R.; trib. of R. Dnieper. Length, 350 tn.

Berezovsk (*bā-rā-zofsk*), tn., Ural Area, U.S.S.R., on trib. of R. Ob, 400 m. N. of Tobolsk; gold mines; leather and wooden articles. Pop. 8,000.

Bergama (anc. *Pergamos*), tn., Anatolia, Asia Minor, 46 m. N. of Smyrna; parchment invented here; leather. Pop. c. 6,000.

Bergamo (*bār-ga-mō*), tn., N. Italy, 30 m. N.E. of Milan; silks, cottons, hats. Pop. 84,000.

Ber'gedorf, tn., Hamburg, Germany, on R. Elbe, 10 m. S.E. of Hamburg; market gardens; leather, glass, enamel. Pop. 18,000.

Ber'gen, port and fort. tn. at head of Byfjord, Norway; second largest tn.; principal shipowning centre; tourist centre; exports fish and fish products, hides, butter. Pop. 91,500.

Ber'gen-op-Zoom, tn., N. Brabant, Holland, 20 m. N. of Antwerp; sugar-beet industry; oyster culture. Pop. 21,000.

Bergerac (*bār-shrak*), tn., Dordogne, France, on R. Dordogne; grains, wine, salmon, chestnuts. Pop. 11,000.

Berhampore, munic. tn., Bengal, India, 105 m. N. of Calcutta; college; first act of Indian Mutiny here. Pop. 26,000.

Berhampur, munic. tn., N.E. Madras, India, 25 m. S.W. of Chilka L.; tussore silk, rice, leather. Pop. 32,000.

Bering Island (*bā'ring*), or **AVATCHA**, isl., Asia, in Bering Sea, E. of Kamchatka; belongs to Russia. Barren and treeless. Area, 615 sq. m.; pop., including the neighbouring Copper I., 650.

Bering Sea, between N. America and Asia, is connected with Arctic Ocean by Bering Strait (36 m. wide; 30 fathoms deep); important seal fisheries.

Berislav, tn., Ukraine, U.S.S.R., on R. Dnieper; important trade in corn and wood. Pop. 12,000.

Berja (*ber'ha*), tn., Spain, 27 m. W. of Almeria; lead mines. Pop. 11,000.

Berk'eley (*bark'li*) ('birch field'). (1) Par. and vil., Gloucestershire, England, 15 m. S.W. of Gloucester; birth-place of Jenner, pioneer of vaccination; cheese. Pop. 800. (2) City, California, U.S.A., on San Francisco Bay; seat of California (state) Univ.; gloves, furniture, machinery, chemicals. Pop. 82,000.

Berk'hampstead, or **GREAT BERK-HAMPSTEAD**, mkt. tn. and urb. dist., Herts, England, 26 m. N.W. of London; manufacture of straw hats, chemicals, turned woodware. Pop. 8,100.

Berk'shire (*bark'*), or **BERKS**, inland co., England, separated from Buckinghamshire and Oxfordshire by R. Thames; borders also on Hampshire, Surrey, and Wiltshire. Generally undulating and moderately well wooded; principal hills are Berkshire Downs, or White Horse Hills, with Cumnor Hurst in N.W. and Inkpen Beacon near S.W. boundary. It is watered by R. Thames, Ock, Kennet, Cole, Lambourn, and Pang. Two-thirds of area is under cultivation, oats being the chief crop; dairying and grazing also successfully engaged in. There are biscuit factories, seed warehouses, and nurseries (Reading); iron foundries, engineering works, boat building, carpet and clothing factories. Windsor Castle and Frogmore are in county. Chief natural curiosity is the great 'White Horse,' nearly 400 ft. in length, cut on chalk hillside in Vale of

Ock. Chief tns., Reading (co. tn.) and Windsor. Area, 725 sq. m.; pop. 311,100.

Berlad, tn., Romania, 60 m. n. of Galatz; candles and soap; annual horse fair. Pop. 25,000.

Berlin. (1) Largest city and cap. of Prussia and of Germany, on R. Spree. Height is c. 100 ft. above sea; site level; well laid out; the R. Spree divides city into two parts; on its r. bk. are oldest parts, Old Berlin, with the Rathaus, and Old Kölln, with royal palace, on an island. Seventy-five per cent. of buildings are modern; principal old building is Kloster Kirch. Principal street is famous Unter den Linden, over a mile long, formed by three avenues of lime trees; it contains numerous public buildings, government offices and statues, and claims to be finest street in Europe. Here also are the new Reichstag building and a royal palace; univ. is foremost in Germany; near it is the Royal Library. There are many bridges over river.

Berlin's geographical situation in centre of n. Prussia and of waterways covering dist. between Rs. Elbe and Oder, and at crossing of lines of communication between Brandenburg, Silesia, Saxony, Hanover, Mecklenburg, and Pomerania, is commercially advantageous. Great manufacturing city; produces woollens, cottons, porcelains, earthenware, machinery, metal goods, beer, paper, gold, silver, and bronze work, hardware. Berlin is a great publishing centre and is the hub of the German rly. system. Pop. 4,024,000. (2) Ontario, Canada. See KITCHENER. (3) City, New Hampshire, U.S.A., 90 m. n. of Concord; pulp, paper, lumber. Pop. 16,000. (4) City, Wisconsin, U.S.A., 20 m. s.w. of Oshkosh; dairy produce; granite quarries. Pop. 4,000.

Bermejo (*ber-mě'ho*), riv., flowing s.e. through Argentine Chaco to join Paraguay R. Length, 1,300 m.

Bermondsey, metropolitan bor. of London; centre of leather industry. Pop. 111,500.

Bermú'das, Brit. crown colony, consisting of 360 small islands (c. 20 inhabited) in N. Atlantic, 600 m. e. of Cape Hatteras; oldest colonial representative government in British Empire; principal islands, Main I. and St. George; health resort; early vegetables. Cap. Hamilton. Area of islands, 19 sq. m.; pop. 30,800.

Bermú'des, asphalt lake (2 sq. m.), Venezuela.

Bernburg, tn., Anhalt, Germany, on R. Saale, 25 m. s. of Magdeburg; lead smelting; chemicals; agricultural machinery; market gardening. Pop. 34,000.

Berne. (1) Canton, Switzerland; most populous and second largest in area; contains Bernese Oberland in s.; fertile valleys; grain and cattle; cheese; watch making, wood carving. Area, 2,657 sq. m.; pop. 699,000. (2) Cap. of Switzerland and of above, situated on rocky peninsula, almost surrounded by R. Aar; commands magnificent Alpine views of Bernese Oberland; univ., museum; textiles, musical boxes; chocolate. Pop. 109,000.

Bernese Oberland, highland district of Berne, Switzerland; occupied by Bernese Alps, which culminate in Finsteraarhorn, Jungfrau, and Aletschhorn; among chief passes are Jungfraujoch, Gemmi, Lauithor, Mönchjoch. Region includes summer resorts of Grindelwald, Interlaken, Meiringen, and great glaciers of Ober- and Unter-Grindelwald.

Bernina Alps. See RHETIAN ALPS.

Bernina Pass (*ber-ně'na*), (7,645 ft.), Swiss pass; running s.e. from St. Moritz in Upper Engadine to Valtellina; hospice on summit.

Bernina Piz, loftiest summit (13,304 ft.) of Bernina Alps; first climbed in 1850. See RHETIAN ALPS.

Beroun (*ber-ōn'*), tn., Bohemia, Czechoslovakia, 16 m. s.w. of Prague; textiles, sugar refining, brewing; cement. Pop. 11,500.

Bertino'ro, tn., Emilia, Italy, 18 m. s. of Ravenna; vineyards, mineral springs. Pop. 8,800.

Bervie, or **INVERBERVIE**, royal burgh and port, Kincardineshire, Scotland; flax spinning. Pop. 1,000.

Berwick, NORTH. See **NORTH BERWICK**.

Berwickshire (*ber'ik-*), co., s.e. Scotland; Lammermoors in n. are chief hills; Tweed is most important river, for 21 m. forming s. boundary; also watered by Leader, Whiteadder, and other affluents of Tweed; fertile productive dist.; many varieties of soil; agriculture principal industry; sheep and cattle largely raised; important fisheries; manufactures include paper, woollens, blankets. Co. tn., Duns. Area, 457 sq. m.; pop. 26,600.

Berwick-upon-Tweed, walled mkt. tn., England, on n. side of mouth of R. Tweed; since 1885 included in Northumberland; remains of castle and fortifications; new bridge over river opened in 1928; salmon and sea fisheries; coal and grain. Pop. 12,300.

Berwyn, tn., Cook, Illinois, U.S.A.; 9 m. w. of Chicago, of which it is a residential suburb. Pop. 47,000.

Besançon (*be-sân-sôn*), chief tn., Doubs, E. France; fortress; univ., observatory; watch making and artificial silk manufactures. Pop. 58,000.

Bes'kid Mountains, a range of the Carpathians, now forming frontier between Czechoslovakia and Poland; crossed by Budapest and Breslau Rly. over Jablunka Pass, also by Munkacs and Lemberg Rly. over Beskid Pass.

Bessarabia (*bes-sa-rā'bi-a*), prov., Romania, lying between the rivs. Dniester and Pruth; n. occupied by spurs of Carpathians, but w. flat and fertile, where agriculture is main occupation—maize, wheat, wine, plums; higher ground covered with wood; in low ground cattle are bred; manufactures include leather, soap, and iron goods; marble quarries. Area, 17,146 sq. m.; pop. 2,345,000.

Bessbrook, tn., co. Armagh, N. Ireland, 2 m. n.w. of Newry; flax spinning. Pop. 2,800.

Bessemer, city, Alabama, U.S.A., 12 m. s.w. of Birmingham; blast

furnaces, foundries, rolling and planing mills. Pop. c. 40,000.

Beth'any ('house of dates'), vil., Palestine, at foot of Mount of Olives; mentioned in N.T. as home of Martha, Mary, and Lazarus. Modern tn., El Azariyeh.

Beth'el ('house of God'), an anc. sanctuary of Israel (probably modern Beitin, 12 m. n. of Jerusalem); mentioned in O.T. in connection with Abraham, Jacob, and as resting-place of Ark.

Bethes'da, tn., Carnarvonshire, Wales, 4 m. s.e. of Bangor; slate quarries. Pop. 4,500.

Beth'lehem ('house of bread'). (1) Vil. (modern Beit-Lahm), Palestine, 5 m. s. of Jerusalem; birthplace of David and afterwards of Christ (Matt. 2: 1-6); church of the Nativity—probably the oldest Christian church in the world. (2) City, Pennsylvania, U.S.A., 50 m. n.w. of Philadelphia; univ.; iron and steel works, silk mills. Pop. 58,000.

Beth'nal Green, eastern metropolitan bor., London; headquarters of costermongers; museum. Pop. 108,200.

Bethsai'da. (1) Tn., Palestine, e. of R. Jordan; scene of two of Christ's miracles. (2) Tn., w. of R. Jordan, birthplace of Philip, Andrew, and Peter (Mark 6: 45).

Béthune (*bā-toon'*), tn., dep. Pas-de-Calais, France, 20 m. w.s.w. of Lille, in the centre of a rich coalfield; connected with La Bassée and Lille by canal; oil, tanning, salt; earthenware and casks. Centre of much fighting in Great War. Pop. 19,000.

Bettw-y-Coed (*bet'oos-i-hoyd'*), urb. dist., Carnarvonshire, Wales, 13 m. s. of Conway; artist and tourist resort. Pop. 900.

Betul', dist., Central Provinces, India; plateau surrounded by belt of hilly forest country; R. Tapti flows through s. portion; wheat, pulses, oil-seeds; teak. Area, 3,826 sq. m.; pop. 364,000.

Beuthen (*boi-ten*), frontier tn., s.e. Prussian Silesia, Germany; lead,

zinc, chemicals, machinery. Pop. 63,000.

Beveland (*bē'vī-land*), two islands, Zealand, Holland; S. Beveland is bisected by canal and connected with mainland and Walcheren by rly. embankments. Aggregate area, 120 sq. m.

Beverley, mkt. tn., near Hull, E. Riding, Yorks; leather, agricultural implements, cloth weaving, chemicals. Pop. 14,000.

Beverly, port, Massachusetts Bay, U.S.A., 2 m. N. of Salem; boots and shoes; machinery; market gardening. Pop. 27,000.

Bewdley, mkt. tn., Worcestershire, England, 3 m. w.s.w. of Kidderminster; horn goods. Pop. 2,900.

Bexhill, munic. bor., Sussex, England, 5 m. s.w. of Hastings; popular wat.-pl. Pop. 21,200.

Bexley, urban dist., Kent, England, 13 m. s.e. of London; part of Greater London; machinery and chemicals. Pop. 32,900.

Beybasar, tn., Turkey, 65 m. w. of Angora; rice, cotton, fruits. Pop. 21,000.

Beyrout. See BEIRUT.

Beziers (*bē-zē-z'*), tn., dep. Hérault, France, 8 m. from Gulf of Lions; red wines, brandy; manure, chemicals. Pop. 66,000.

Berwa'da, tn., Madras, India, on R. Kistna; important road, rail, and canal meeting-place; rice mills, cotton factories. Pop. 44,000.

Bhagalpur. (1) Div., Bihar and Orissa, India. Area, 18,613 sq. m.; pop. 7,887,000. (2) Central dist. in above; rice, maize, wheat, oil-seeds, cotton. Area, 4,226 sq. m.; pop. 2,034,000. (3) Chief tn. of above dist., on R. Ganges; Mohammedan shrines and interesting Jain temples; agricultural produce; silk weaving. Pop. 69,000.

Bhamo. (1) Dist., Upper Burma; in basin of R. Irrawaddy; rich teak forests. Area, 4,416 sq. m.; pop. c. 80,000. (2) Chief tn. of above dist.; highest point of Irrawaddy navigation. Pop. 7,700.

Bhandar'a. (1) Dist., Nagpur div., Central Provinces, India; rice, wheat, oil-seeds, bamboo, tobacco. Area, 3,623 sq. m.; pop. 718,000. (2) Chief tn. of above dist., 30 m. e. of Nagpur; brass working and cotton cloth. Pop. 14,000.

Bharatpur (*bhūr't'pūr*). (1) Indian state, Rajputana, India, on border of United Provs.; cotton cloth, iron-ware, glass. Area, 1,982 sq. m.; pop. 496,000. (2) Cap. of above, 30 m. w. of Agra.

Bhaunagar (*bōw-nūg'er*). (1) Indian state, Bombay, India, in Kathiawar Pen.; grain, cotton, salt. Area, 2,860 sq. m.; pop. 426,000. (2) Chief tn. and port of above, on Gulf of Cambay; iron and tile works; exports cotton. Pop. 59,000.

Bhir, dist., N.W. Hyderabad, India; wheat, cotton, linseed, sugar. Chief tn., Bhir, 190 m. e. of Bombay. Area, 4,460 sq. m.; pop. 400,000.

Bhiwani (*bē-wōn'i*), tn., Hissar dist., Punjab, India, 70 m. w. of Delhi; metal working; cotton goods. Pop. 33,000.

Bhopal. (1) Largest Indian state in Central India Agency; next to Hyderabad, most important Mohammedan state in India. Hilly tableland. Area, 6,902 sq. m.; pop. 692,000. (2) City, cap. of above state, 180 m. N.W. of Nagpur; weaving and printing of cotton cloth, jewellery. Pop. 45,000.

Bhor, Indian state, Bombay Presidency, India; rice. Chief tn., Bhor, 25 m. s. of Poona. Area, 925 sq. m.; pop. 130,000.

Bhuj, cap. of Indian state of Cutch, N.W. India; silver work. Pop. 19,000.

Bhutan, independent state under Brit. protection, E. Himalayas; is bounded N. and E. by Tibet, S. by Brit. India, W. by Sikkim and Chumbi Valley (belonging to Tibet). Surface is mountainous; watered by various tribs. of Brahmaputra. Climate varies according to elevation. Bhutan has extensive forests, and produces maize, wheat, rice, millet, and mustard; manufactures strong cloth, mats and baskets, swords. Inhabitants are

chiefly Bhutias, racially allied to Tibetans. Chief tns., Punakha (cap.) and Tasichozong. Area, c. 18,000 sq. m.; pop. c. 300,000.

Biafra, Bight of, a large and deep indentation on w. coast of Africa, between mouth of R. Niger and Cape Lopez (400 m.).

Bialystok (*bya-wis'tok*). (1) County, Poland, bordering on E. Prussia and Lithuania; well-watered, sandy plain with extensive coniferous forests; chief crops, potatoes, rye, oats, flax. Area, 12,597 sq. m.; pop. 1,303,000. (2) Tn., cap. of above, 110 m. N.E. of Warsaw; woollen factories; boots and shoes. Pop. 76,800.

Biarritz (*bé-ar-rîts*), tn., Basses-Pyrénées, France, on Bay of Biscay; fashionable winter and summer seaside resort. Pop. 18,400.

Bicester (*bis'ter*), urb. dist., Oxfordshire, England, 12 m. N.N.E. of Oxford; lace, sackings; cattle fairs; hunting centre. Pop. 3,100.

Bidasoa, small riv., N. Spain; lower course forms part of frontier with France.

Biddeford, city, Maine, U.S.A., 17 m. S.W. of Portland; has cotton, woollen, and lumber mills, receiving water power from falls of Saco R.; granite. Pop. 18,000.

Bid'olph, urb. dist., N. Staffs, England, 3 m. S.E. of Congleton; iron-works, collieries; cloth. Pop. 8,300.

Bid'ford, par. and port, N. Devon, England; potteries, shipbuilding, sail lofts, etc. Pop. 8,800.

Bieb'rich, tn., Hesse-Nassau, Prussia, on R. Rhine, 3 m. S. of Wiesbaden; cement, aniline dyes. Pop. 21,000.

Biel (*bêl*). See **BIENNE**.

Biclaya-Tserkov (*bê-â-la'ya-tser-kof*), tn., Ukraine, U.S.S.R.; on trib. of R. Dnieper, 150 m. E.S.E. of Kiev; important annual fairs; trade in cattle, beer, grain. Pop. 54,000.

Bielefeld (*bê-le-felt*), tn., Westphalia, Prussia, 27 m. S.E. of Osnabruck; centre of linen industry; damask, silk, sewing machines, engines, motor-cars; bleaching fields. Pop. 86,000.

Bielgorod (*bê-âl-go-rod*), tn., Kursk,

Russia, 50 m. N. of Kharkov; famous annual fairs; soap, candle, brick making; bee keeping. Pop. 22,000.

Bielitz (*bê-lêtz*), tn., Poland, 46 m. S.W. of Cracow; manufactures woollen goods, linen, jute, machinery. Pop. 18,600.

Bielopol (*bê-yâ'lo-pol*), tn., Russia, 120 m. N.W. of Kharkov; distilling, tanning, brick making. Pop. 16,000.

Bienna (*bê-en*), tn., Berne, Switzerland, on lake of same name, 16 m. N.W. of Berne; important watch factories; museum, rich in antiquities. Pop. 37,000.

Bierley, NORTH, par., W. Riding, Yorks, England, 2 m. S.E. of Bradford; coal mines; iron works. Pop. 16,000.

Biesbosch (*bê's-bosch*), dist., Netherlands, c. 6 m. E. of Dordrecht; agglomeration of islands, waterways, and marshes; result of bursting of dam in Maas (1421); most of land reclaimed by dykes; intersected by artificial channel, and connected with North Sea by two waterways. Area, 77 sq. m.

Biggar, par. and tn., Lanarkshire, Scotland, 8 m. S.E. of Carstairs; cattle and horse fairs. Pop. of town, 1,300.

Biggarsberg Mountains, in Natal, S. Africa; branch of Drakensberg Mts.; highest peak, Indumeni (7,200 ft.).

Biggleswade, urb. dist., Beds, England, 9 m. S.E. of Bedford; corn trade; market gardening. Pop. 5,800.

Bihar' and Oriss'a, prov., E. India; bounded N. by Nepal, E. by Bengal, S. by Bay of Bengal and Madras, W. by Central Provs. and United Provs.; drained mainly by R. Ganges, in S. by R. Mahanadi; contains N.E. extremity of Deccan, with rich coalfields, iron, copper, and mica; remainder of prov. agricultural; rice, wheat, maize, pulses, sugar-cane, tobacco; principal industry, iron and steel manufacture at Jamshedpur. Prov. separated from Bengal in 1912; cap. Patna. Area, 111,809 sq. m.; pop. 38,000,000.

Bijapur. (1) Dist., S. Bombay, India; rainfall irregular; cotton and

wheat. Area, 5,669 sq. m.; pop. 797,000. (2) Tn., in above dist., 50 m. s. of Sholapur; cotton ginning; trade in grain and cattle. Pop. 27,600.

Bijā'war, Indian state, Central India; well-forested; barley, grain; iron ore. Area, 973 sq. m.; pop. 112,000. Chief tn., Bijawar, 105 m. n.w. of Jubbulpore. Pop. 6,000.

Bijnor, dist., United Provinces, India; sugar-cane grown; sugar manufacture. Area, 1,791 sq. m.; pop. 740,200. Cap. Bijnor, 35 m. n.e. of Meerut; sugar. Pop. 18,000.

Bikaner (*be-kan-er*). (1) Indian state, Rajputana, India; mostly sandy and waterless; frequent famines; camels, horses, and sheep reared; woollen shawls, carpets, leather work. Area, 23,315 sq. m.; pop. 660,000. (2) Cap. of above, 130 m. n.w. of Ajmer. Pop. 69,000.

Bilaspur, tn., Central Provinces, India, 16 m. s.e. of Jubbulpore; silk weaving, cotton cloth manufacture. Pop. 24,000.

Bilbao (*bél-bá'o*), tn., principal port, N. Spain; centre of great mining dist.; iron, copper ores. Pop. 148,000.

Billerica (*bíl-er-ik'i*), mkt. tn., s. Essex, England, 8 m. s. of Chelmsford. Pop. 1,500.

Bill'ingham, urb. dist., Durham, England, 2 m. n. of Stockton; anc. church. Pop. 18,000.

Bill'ings, city, Montana, U.S.A., on Yellowstone R.; cattle and sheep raising; beet sugar. Pop. 16,000.

Bill'ingate, old river-gate and wharf, now fish-market of London.

Bill'ingshurst, vil., w. Sussex, England, 6 m. s.w. of Horsham. Pop. 1,875.

Bil'liton, isl., Dutch East Indies; between Banka and Borneo; tin deposits; coconuts, sago; trepang, tortoises, edible birds' nests; copra and gum exported. Area, 1,873 sq. m.; pop. 69,000.

Bil'oxi, tn., Mississippi, U.S.A., on Gulf of Mexico, 75 m. n.e. of New Orleans; summer and winter resort; important fisheries; oysters, crabs, turtles. Pop. 15,000.

(3,601)

Bil'ston, urb. dist., par., and mkt. tn., Staffs, England, 2½ m. s.e. of Wolverhampton; iron smelting and founding; engineering; coal mines; grindstones. Pop. 31,200.

Bingen (*běng'an*), tn., Hesse, Germany, on l. bk. of R. Rhine; wine, leather; tourist resort; in middle of river stands the famous 'Mouse Tower.' Pop. 9,100.

Bingerville (*bān-shā-věi*), tn., Ivory Coast, W. Africa; cap. and administrative seat of the colony.

Bing'hamton, tn., New York, U.S.A., on Susquehanna R., 140 m. n.w. of New York; shoes, cigars; iron and steel goods; patent medicine. Pop. 77,000.

Bing'ley, mkt. tn., W. Riding, Yorks, England, 5 m. n.w. of Bradford; woollens and metal working. Pop. 20,600.

Bio-Bio (*bě'o-bě'o*). (1) Prov., Chile, S. America; mountainous and forested; agriculture, timber. Cap. Los Angeles, 60 m. s.e. of Concepcion. Area, 5,353 sq. m.; pop. 107,000. (2) Riv., Chile; length, 220 m.; navigable 100 m.

Birbhum (*bēr'boom*), dist., Bengal, India; dry climate; healthy; rice, sugar-cane grown; manufactures cotton, silk. Cap. Suri, 105 m. n.w. of Calcutta. Area, 1,732 sq. m.; pop. 847,000.

Birch'ington, par. and vil., n.e. Kent, England, 3½ m. w. of Margate; fashionable seaside resort; D. G. Rossetti, poet and painter, died here (1882). Pop. (par.) 3,500.

Birkensid (*bēr'ken-feld*), detached province of Oldenburg, Germany, in s. of Rhineland, Prussia; hilly, well-wooded; agriculture; ironstone and slate quarries. Cap. Birkenfeld. Area, 312 sq. m.; pop. 56,000.

Birk'enhead, co. bor. and port, Cheshire, England; has ferry, and tunnels under Mersey connecting it with Liverpool; large shipbuilding works, iron foundries, breweries, flour mills; splendid docks (water area 165 ac.); exports coal; enormous cattle and meat trade. Pop. 147,900.

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Bir'mingham. (1) City, Warwickshire, England, with suburbs extending into Staffordshire and Worcestershire; the greatest Midland manufacturing town, 97½ m. S.E. of Liverpool, 112 m. by rail N.W. of London. Town irregularly laid out; some fine streets and public buildings near centre, including town hall, art gallery, and council house. Univ. was established in 1900, and there are a technical school, a school of art, and a grammar school founded and endowed by Edward VI.; several large hospitals and charitable institutions. Manufactures include all kinds of metal work, especially in brass; founding, rolling, stamping, plating, drawing; making of machinery, iron roofs, girders, gasometers; steam, gas, and hydraulic engines; railway plant, motor-cars, tyres, rubber goods; electric apparatus, tools, guns, rifles, bells, electroplate, watches, clocks, table glass, chemicals, ammunition, swords, jewellery, coins, buttons, buckles, lamps, toys, pins, steel pens, nails, screws, locks. Rlys. run in all directions; canals to Severn, Thames, Mersey, and through Potteries to Trent. Pop. 1,002,400. (2) City, Alabama, U.S.A.; important iron and steel manufactures; cotton; chemicals; centre of agricultural trade. Pop. 258,000.

Bir'nam, vil. and hill, near Dunkeld, Perthshire, Scotland; frequented by tourists. Pop. 700.

Birr, or **PARSONSTOWN**, urb. dist., Offaly co. (King's co.), I.F.S.; Birr Castle houses famous Rosse telescope. Brewing. Pop. 3,400.

Bir'stall, urb. dist., W. Riding, Yorks, England, 3 m. N.W. of Dewsbury; woollens, shoddy, carpets, rugs. Pop. 7,200.

Bir'tley, par. and vil., Durham, England, 5½ m. S.E. of Gateshead; coal mining; clay and stone quarries. Pop. (par.) 11,300.

Bis'bee, tn., S.E. Arizona, U.S.A., 7 m. from frontier of Mexico; copper mined in great quantity; silver, gold, lead, zinc. Pop. 18,000.

Bis'cay. (1) Or **VIZCAYA**, prov., N.

Spain; mainly hilly; drained by Rs. Cadagua and Ibaizabal; much forest and coarse pasture; little agriculture. Produces iron ore, live-stock, maize, fruit. Cap. Bilbao. Area, 836 sq. m.; pop. 444,000. (2) **BAY OF**, bay of Atlantic Ocean; formed by coasts of France and Spain; shores rocky and inhospitable; subject to severe storms.

Bish'op Auck'land, urb. dist., Durham, England, 9 m. S.W. of Durham; collieries and iron works in vicinity. Pop. 12,300.

Bish'op's Stort'ford, mkt. tn., Herts, England, 11 m. N.E. of Hertford; has maltings and breweries. Pop. 9,500.

Bishop's Waltham, tn., Hants, England, 9 m. S.E. of Winchester; ruins of Waltham Palace (1135) lie to S.W. Pop. 4,500.

Bis'kra, tn. and oasis, Algeria, Africa, 200 m. S.E. of Algiers; comprises number of small villages, separated by olive groves and date palms; genial winter climate; popular resort. Pop., tn. 9,400; oasis, 16,300.

Bis'ley, vil., N.W. Surrey, England, 6 m. from Aldershot; its common is meeting-place of the National Rifle Association.

Bismarck, cap. of N. Dakota, U.S.A., on I. bk. of R. Missouri; dairy produce, flour milling. Pop. 11,000.

Bismarck Archipelago. See **NEW BRITAIN** (1).

Bismarck Mountains, a N.W. to S.E. range in S.W. of Territory of New Guinea; some peaks are perpetually ice-capped. Gold has been found in the range.

Bissag'os Islands, archipelago of about thirty volcanic isls. off Senegambia, W. Africa, belonging to Portugal. Largest of group is Orango.

Blitche (*bêch*), (German *BITSCH*), tn., Moselle, France, at N. base of Vosges, 49 m. by rail N.W. of Strasbourg; citadel 250 ft. above tn.; shoes, watches; in German terr. 1871-1918. Pop. 2,500.

Bit'lis, vilayet and tn., E. Turkey, 110 m. S.S.E. of Erzerum; sulphur springs; fruit; manufactures red cotton cloth. Pop. of vilayet, 90,000.

Bitolj (*bě'tolsh*), formerly MONASTER, tn., Yugoslavia (Serbia), 137 m. by rail w.n.w. of Salonika; tanneries; manufacture of carpets, ribbons, stockings; important trading centre for cereals and hides. Pop. 28,400.

Biton'to, tn. and episc. see, Apulia, s.e. Italy, 9 m. w. of Bari. Wine and olive oil are produced. Pop. 32,000.

Bit'ter Lakes, GREAT and SMALL, 6 m. n. of Suez, Egypt. The two lakes form about 23 m. of the Suez Canal.

Biwa (*bě'wa*), LAKE, s. Honshu, Japan, 30 m. n.e. of Osaka, largest in Japan. Area, 180 sq. m.

Bizerta (*bě-zār'ta*), port, Tunisia, N. Africa; fisheries; coaling and naval station. Pop. 21,000.

Björneborg. See PORT.

Black burn, parl., munic., and co. bor., Lancs, England; centre of Lancashire cotton spinning and weaving; birthplace of Hargreaves, who invented spinning-jenny (1764). Pop. 122,700.

Black Country, Eng. mining and manufacturing district in s. Staffs, stretching from Birmingham to Wolverhampton in one direction, and Walsall to Dudley in another.

Black Earth Area, CENTRAL, administrative unit, Russia, U.S.S.R. Established by Soviet Govt. in 1928. Productive plain; rye, millet, oats, summer wheat, potatoes, hemp, sunflower seed, sugar-beet. Cap. Voronezh. Area, 78,000 sq. m.; pop. 11,600,000.

Black Forest, or SCHWARZWALD, mountainous dist., Baden and Württemberg, Germany, east of R. Rhine; highest peak, Feldenberg, 4,900 ft.; extensive forests; picturesque scenery; tourist resort; cattle, clocks, toys. Area, 1,844 sq. m.; pop. 596,000.

Blackheath, a common now 267 ac. in extent, partly in bor. of Greenwich and partly in Lewisham, London; at one time noted haunt of highwaymen.

Black Hills, mts. in S. Dakota and Wyoming, U.S.A.; highest peak, Harney (7,216 ft.); gold and silver mines; fine grazing. Area, c. 6,000 sq. m.

Black Isle, peninsula (20 m. by 12 m.), Ross and Cromarty, between Beaully and Moray Firths and Cromarty Firth, Scotland; agriculture, quarrying, fisheries.

Black pool, munic. and co. bor., and popular wat.-pl., Lancs, England, 46 m. n. of Liverpool; excellent sands and beautiful promenade; winter gardens. Pop. 101,500.

Black Rock, urb. dist., Dublin, I.F.S., on Dublin Bay; residential quarter. Pop. 10,000.

Blackrod, urb. dist., Lancs, England, 6 m. w. of Bolton; coal-mining. Pop. 4,000.

Black Sea, or EUXINE, land-locked sea, between Europe and Asia; area, 164,000 sq. m.; outlet to Mediterranean by Bosphorus, Sea of Marmara, and Dardanelles; average depth, c. 3,900 ft.; shores low on n. and w.; good harbours except in n.; numerous inflowing rivers; surface waters fresher than ocean, bottom waters salt and lifeless; nearly always ice-free; chief ports, Varna, Odessa, Batum. Area, 164,000 sq. m.

Blackwater, name of some twenty rivers and eight villages in U.K.; frequent occurrence of name in Ireland due to dark-coloured bog water; most important of rivs. rises on borders of Cork and Kerry and flows into Yougal harbour; length, 100 m.

Blaenan Festiniog (*blen'fes-tin'i-og*), vil., Merioneth, Wales, 2½ m. n. of Festiniog; part of Festiniog urb. dist.; slate quarries.

Blaen'avon, urb. dist. and par., Monmouthshire, England, 5 m. n.w. of Pontypool; iron and steel manufactures; tinsplate; coal mines. Pop. 11,100.

Blagovyeshchensk (*blago-vāsh'-chensk*), tn., E. Siberia, U.S.S.R., on l. bk. of R. Amur; river port; trades in gold, cattle, cereals; flour mills and ironworks. Pop. 61,200.

Blai'na or Nantyglo and Blaina, urb. dist., Monmouthshire, England, 3 m. n. of Abertillery; coal mines and blast furnaces. Pop. 13,200.

Blair A'tholl, or BLAIR ATHOLE, vil.

and par., N. Perthshire, Scotland, 3 m. N. of Pass of Killiecrankie; Blair Castle, seat of Duke of Atholl. Pop. of par. 1,800.

Blairgowrie, tn., Perthshire, Scotland, on R. Erich, 14 m. N. of Perth; fruit-growing centre; agricultural machinery; linen and jute mills. Includes Rattray. Pop. 4,700.

Blanc (*blon*), MONT, highest peak (15,782 ft.) of Alps, and, outside of some Caucasus peaks, the loftiest summit in Europe; on boundary of France and Italy; first ascended 1786.

Blanche, DENT. See DENT BLANCHE.

Blanchford Forum, munic. bor. and mkt. tn., Dorsetshire, England, 16 m. S.E. of Dorchester; anc. earthworks and barrows in dist. Pop. 3,400.

Blankenberge (*blank'en-ber-ge*), seaside resort, Belgium, 10 m. N.E. of Ostend; fisheries; golf links. Pop. 6,800.

Blankenburg (*blank'en-boorg*), wtpl., Brunswick, Germany, on N. slopes of Harz Mts., 37 m. S.W. of Magdeburg; market gardening. Pop. 12,000.

Blantyre ('warm retreat'). (1) Tn. and par., Lanarkshire, Scotland, 3 m. N.W. of Hamilton; coal; birthplace of Livingstone. Pop. 18,200. (2) Mission station, Nyasaland, Africa; named after Livingstone's birthplace; founded 1876; commercial centre.

Blarney, vil., co. Cork, I.F.S., 5 m. N.W. of Cork; in outer wall of Blarney Castle is the famous 'Blarney Stone.' Pop. 700.

Blaydon, urb. dist. and tn., Durham, England; on R. Tyne; coal mining; machinery, tools. Pop. 32,300.

Blenheim (*blen'im*). (1) Vil., Bavaria, near Danube, 30 m. N.E. of Ulm. Scene of Marlborough's victory, 1704. (2) Chief tn. of Marlborough, S. Island, New Zealand, near Cook Strait; rich agricultural and fruit district; gold in vicinity. Pop. 3,800.

Bletchingley, par. and vil., Surrey, England, 3 m. E. of Redhill; its High

Street is part of the Pilgrims' Way to Canterbury. Pop. (par.) 2,300.

Bletchley, urb. dist., N.E. Bucks, England, 1 m. W. of Fenny Stratford; rly. jn. Pop. 6,200.

Blida (*blē'da*), fort. tn., Algeria, N. Africa, 23 m. S.W. of Algiers; orange and flour trade. Pop. 25,000.

Blockley, par. and vil., E. Worcs, England, 11½ m. S.E. of Evesham; in detached part of co. Pop. (par.) 1,800.

Bloemfontein (*bloom'fon-tin*), cap., Orange Free State, Union of S. Africa; situated on a plain; elevation, 4,518 ft.; well built; large gardens; healthy climate; Grey Univ. Coll.; large live-stock fairs. Pop. 39,000 (whites 23,000).

Blois (*blwa*), anc. city, dep. Loir-et-Cher, France, on R. Loire; famous château, seat of Dukes of Orleans; wine, timber; boots, shoes; furniture. Pop. 19,000.

Bloomfield, tn., New Jersey, U.S.A., adjoining Newark; manufactures woollens, rubber goods, silks, paper. Pop. 38,000.

Bloomington. (1) City, Illinois, U.S.A., 60 m. N.E. of Springfield; coal mines; motor-cars; stationery. Pop. 31,000. (2) City, Indiana, U.S.A., 50 m. S.W. of Indianapolis; state univ.; large limestone quarries; furniture, gloves. Pop. 18,000.

Bloxwich, par. and vil., Staffs, England, 2½ m. N.W. of Walsall; coal and ironstone mines; ironworks. Pop. (par.) 15,000.

Bluefields, port, Nicaragua, on Caribbean Sea; bananas; lumber and cattle are exported. Pop. 7,200.

Blue Mountains. (1) Mt. range, New S. Wales, Australia. (2) Range, Oregon, U.S.A. (3) Ridge, E. Jamaica. (4) Range, Pennsylvania, U.S.A.

Blundellsands and Crosby, dist., Lancs, England, 6½ m. N.W. of Liverpool; residential area. Pop. 4,000.

Blyth, port, Northumberland, England, 8 m. N. of Tynemouth; exports coal; shipbuilding; imports timber. Pop. 31,800.

Bobrinets, tn., Ukraine, U.S.S.R.,

100 m. N. of Kherson; manufactures tobacco; flour mills. Pop. 15,000.

Bobruisk (*bo-broo'isk*), tn., White Russia, U.S.S.R., on r. bk. of Berezhina R.; flour mills, foundries; river trade in grain, timber. Pop. 51,000.

Bo'cas del To'ro. (1) Prov., Panama; banana production; tropical agriculture; fishing. Pop. 22,000. (2) Cap. of above; exports bananas, coconuts. Pop. 10,000.

Bochnia (*boh'nya*), tn., Galicia, Poland, 22 m. S.E. of Cracow; salt and gypsum mines. Pop. 11,000.

Boch'olt, tn., Westphalia, Prussia, near Dutch frontier; woollens; machinery, iron foundries. Pop. 30,000.

Boch'um, tn., Westphalia, Prussia, in Ruhr coal basin; steel and iron works. Pop. 211,000.

Bodenbach. See **PODMOKLY**.

Bodensee. See **CONSTANCE**.

Bod'min, tn., Cornwall, England; agricultural trade; boots and serges; live-stock fairs. Pop. 5,500.

Bodø (*bo'de*), port, Nordland, Norway, on Saltenfjord; fish; ciderdown. Pop. 4,800.

Boeotia (*bo-shi-a*), dist., ancient Greece, bounded by Phocis, Gulf of Corinth, Attica, and the Euripos; chief city was Thebes; chief riv., Cephissus; chief lake, Copais; plains bounded by mts.; Mt. Helicon in S.W. Boeotia with Attica now dep. of Greece. Pop. 793,800.

Boeroa. See **BURU**.

Bog'nor Regis, seaside resort, Sussex, England; fine sands. Pop. 13,500.

Bogodukhov (*bo-ho-doo'chov*), tn., Ukraine, U.S.S.R., 30 m. N.W. of Kharkov; mkt. gardens; tanning industry. Pop. 16,000.

Bogong', MOUNT, a summit (6,508 ft.) of Australian Alps, Victoria.

Bogorodsk (*bo-ho-radsk'*), tn., Russia, U.S.S.R., 35 m. E. of Moscow; textile mills; chemicals. Pop. 35,000.

Bögöta', cap., Colombia, S. America, on plateau 8,000 ft. above sea; cathedral, capitol, observatory, library, univ., and museum; subject to earthquakes. Pop. 166,000.

Bohē'mia, western part of Czechoslovakia; bounded N. and W. by Germany, S. by Austria, E. by Moravia. Surface is undulating plateau with slight northern slope, surrounded by mt. ranges, N.E. by Riesengebirge, S.W. by Erzgebirge, S.W. by Bohemian Forest, S.E. by Bohemian and Moravian Mts.; drained by R. Elbe and tribs., chief being Moldau, Iser, and Eger. Climate is genial in valleys, cold in higher districts. About one-third of surface forested; over half cultivated; chief crops: wheat, rye, barley, oats; flax, hops, fruit, beet produced. The chief mineral is lignite; black coal, iron ore, silver, gold, antimony, zinc, tin, graphite, lead, sulphur also produced; manufactures include sugar, woollens, carpets, cottons, linen, silk, gloves, glass, buttons, bottles, porcelain. There are mineral springs at Carlsbad, Marienbad, Sedlitz, etc. Bohemia imports agricultural machinery and road-rollers from U.K., tools from Germany. Cap. Prague (Praha). Area, 20,102 sq. m.; pop. 6,923,000.

Bohemian Forest, range of mts. between Bohemia and Bavaria; Mt. Arber (4,785 ft.) is chief peak; pine and beech forests; crossed by three rlys. and four roads.

Bohol', isl., Philippines, N. of Mindanao; coffee, sugar, rice. Area, 1,400 sq. m.; pop. 243,150.

Boise (*boi'zi*), cap. Idaho, U.S.A.; valuable mines; centre of well-irrigated dist. yielding fruit. Pop. 20,000.

Bois-le-Duc. See 's **HERTOGEN-BOSCH**.

Bokhara. See **BUKHARA**.

Bokoto. See **PESCADORES**.

Boks'burg, tn., Transvaal, S. Africa, 12 m. E. of Johannesburg; gold and coal mining. Pop. 37,000 (whites, 12,100).

Bolan' Pass, narrow gorge leading N.W. from R. Indus valley to the highlands of Sarawan, Baluchistan; is traversed by military road and by rly. to Quetta. Length, 60 m.; summit attains 5,900 ft.

Bolbec', tn., dep. Seine-Inférieure,

France, 17 m. E. of Havre; spinning, weaving, and printing. Pop. 10,000.

Bolgrad', tn., Bessarabia, Romania, at head of L. Yalpukh, 25 m. N. of Ismail; trade in grain; brick making; tallow factories. Pop. 13,000.

Bolivar (*bo-lé'vár*). (1) State, Venezuela, S. America; well-forested plains with many rivers; rubber, copaiba, balsam, tobacco; gold is found. Cap. Ciudad Bolivar. Area, over 90,000 sq. m.; pop. 75,000. (2) Prov., Ecuador, S. America; coffee, tobacco, cereals grown; mostly forest. Cap. Guarando, 100 m. S. of Quito. Area, 1,159 sq. m.; pop. 45,000. (3) Maritime dep., N. Colombia, S. America; densely wooded plains; little cultivation. Cap. Cartagena. Area, 22,320 sq. m.; pop. 457,000.

Bolivia, inland rep., S. America; bounded N. and E. by Brazil, S. by Paraguay and Argentina, W. by Chile and Peru. W. consists of plateaus lying between Andes and Cordillera Real to E.; of these, Oruro plateau (with Lakes Titicaca and Poopo) is 13,000 ft. above sea-level; southern part lower, a sandy or salt-covered desert; along N.E., hills sink rapidly, and on E. by series of terraces to northern and eastern plains; former drained by Rs. Beni and Mamore to R. Madeira, latter by R. Paraguay; other rivs. are Guaporé, Purus. Chief mts. are Bolivian Andes; there are many active volcanoes. Climate varies with altitude and exposure; higher plateaus have hot days, cold nights; lower plateaus and eastern terraces temperate; upper valleys subtropical; northern and eastern plains tropical; first two regions have wet and dry seasons; elsewhere rain falls all year round. Fauna includes great variety of monkeys, birds, and insects. Condors and humming-birds occur; wild animals include tapir, jaguar; rly. communications poor (c. 1,500 m.); Rs. Beni and Mamore are navigable; roads few and bad. Upper plateaus produce potatoes, barley; lower plateaus, wheat, maize;

upper valleys, fruits; great plains have luxuriant tropical vegetation. There are grassy savannas in S., valuable timber in N.; rubber, copal, coffee, cocoa, coca, rice, cotton, cinchona, pineapples, bananas produced; cattle and sheep largely bred; vicuña, alpaca, llama, guanaco, chinchilla are valued for their skins and wool. Minerals include silver, copper, tin, lead, zinc, antimony, bismuth, wolfram, gold, salt, oil; many of these await development. Tin is the great source of wealth, silver coming next in importance. Chief imports are provisions, wines, spirits, textiles, hardware; exports, silver, rubber, tin, wool, hides, cattle, coffee, cocoa. Chief towns, La Paz (actual cap.), Cochabamba, Potosí, Sucre (nominal cap.), Oruro. Area, 514,155 sq. m.; pop. 2,975,000.

Bolkhov', tn., Russia, 35 m. N. of Orel; trade in cattle, agricultural products; orchards. Pop. 18,000.

Boll'ington, urb. dist., Cheshire, England, 3 m. N. of Macclesfield; cotton manufacture. Pop. 5,000.

Bologna (*bò-lôn'yā*). (1) Prov., Italy, between R. Po and Apennines; wheat and maize largely grown. Area, 1,465 sq. m.; pop. 642,700. (2) Cap. of above; two leaning towers; univ. (11th cent.); great rly. centre; sausages, macaroni; sugar refining; rly. rolling stock. Pop. 240,000.

Bolse'na, lake, Italy, W. of R. Tiber, in centre of volcanic district; 1,000 ft. above sea-level; abounds in fish. Area, 71 sq. m.

Bol'sover, urb. dist., par., tn., Derbyshire, England, 5½ m. E. of Chesterfield; coal mines; magnesite limestone quarries. Pop. 11,800.

Bols'ward, tn., Friesland, Netherlands, 13 m. S.W. of Leeuwarden; cheese, butter. Pop. (comm.) 7,000.

Bolt Head, cape, S. Devonshire, England; alt. 420 ft.

Bol'ton. (1) Co. bor., Lancs, England; centre of cotton industry; manufactures muslins, velvet, paper, chemicals; iron foundries, sawmills; coal mines in neighbourhood; gram-

mar school (1641). Pop. 177,300. (2) **UPON-DEARNE**, urb. dist., W. Riding, Yorks, England, 7 m. w. of Doncaster; coal-mining. Pop. 14,200.

Bo'ma, port, and former cap. Belgian Congo, on r. bk. of R. Congo, 55 m. from mouth. Was a slave market. Pop. c. 3,000.

Bombay. (1) Presidency, British India; bounded n. by Baluchistan and Punjab, e. by Rajputana, Central India Agencies, Berar, Hyderabad, and Madras, s. by Mysore and Madras, w. by Arabian Sea; coast-line towards n. broken by Gulfs of Cutch and Cambay; Narbada R. flowing to latter, divides prov. into two parts, of which northern consists of Gujarat and great plain of Sind, southern of coastal strip along Arabian Sea and part of Deccan tableland; chief mountains are W. Ghats, Satpura range, and outliers of Aravalli Hills; rivs. Indus (which traverses Sind), Narbada, Tapti. Climate varies; high temp. in Sind plains; rainfall slight in n., moderate on tableland; heavy on coastal strip; wettest months, June to October; chief crops are wheat, cotton, millet, rice; other products are pulse, oil-seeds, sugar-cane, indigo, tobacco; principal industries, cotton manufacture, silk weaving, carpets, leather goods, pottery, brasswork; water-power from Western Ghats; minerals are scarce. Rly. mileage, principal lines, c. 6,000 m. Area (including feudatories and the dependency of Aden), 187,074 sq. m.; pop. 27,000,000. (2) Cap. of above, and second port of India, situated in s. of isl. of same name, lying off coast of prov. and connected with mainland by bridges and causeways. In n. is native town; in s., European garrison; natives are of many different races. Bombay has some fine buildings, including a univ., the Victoria railway terminus, Ragabai Tower, municipal offices, several colleges, and large hospitals; most important manufacturing town in India; has magnificent natural harbour, wet docks, and many dry docks; rly. communica-

tion with all parts of India; centre of cotton trade; other industries are dyeing, tanning, metal work, and the making of 'Bombay blackwood furniture'; great sea trade; exports: raw cotton, seeds, grain; imports: manufactured goods, metals, machinery. Pop. 1,176,000.

Bona. See **Bône**.

Bondy (*bon-dē*), comm., Seine, France; environs of Paris; brewing; chemical manufactures. Pop. 7,500.

Bône, or **BONA**, port, Algeria, N. Africa; good harbour; manufactures tapestry and leather; exports phosphates, sheep, barley, esparto; imports manufactured articles. Pop. 52,000.

Boness', or **BORROWSTOUNNESS**, port, West Lothian, Scotland, on s. shore of Firth of Forth; extensive harbour; large shipping trade; coal, iron, bricks, pottery; imports pit wood. Pop. 10,100.

Bon'hill, tn. and par., on R. Leven, Dumbartonshire, Scotland; has calico printing, bleaching, and dye works. Pop. (par.) 16,600.

Bon'i, native state, s. Celebes, Dutch E. Indies; rice, tobacco; plaited goods. Area, 2,600 sq. m.; pop. c. 200,000.

Bonifacio (*bon-i-fäch'-yo*). (1) Port, Corsica, on peninsula in Strait of Bonifacio; olive oil; tobacco; cork-cutting; coasting trade. Pop. 2,300. (2) STRAIT OF, narrow, rocky, and difficult channel, some 7 m. wide, between Corsica and Sardinia.

Bonin Islands (*bo-nin*'), or **OGASAWARA JIMA**, chain of twenty small volcanic islands, N. Pacific, between Japan and Marianas Islands; belong to Japan; cap. Port Lloyd, on Peel I., the largest of the chain; tropical vegetation; valuable timber. Turtles caught in large numbers. Pop. 5,000.

Bonn, tn., Rhenish Prussia, Germany, on l. bk. of R. Rhine; famous univ.; antiquarian museum and library; fine bridge across Rhine; manufactures stoneware. Pop. 90,200.

Bonny'. (1) Port, Nigeria; exports palm oil. Pop. c. 7,000. (2) Riv. on

which above is situated; falls into Bight of Biafra; one of most easterly distributaries of R. Niger.

Bonnyrigg and Lasswade, burgh, Midlothian, Scotland, 5 m. s. of Edinburgh; paper mills; carpets; coal mining. Pop. 4,500.

Boom, tn., Belgium, 9 m. s. of Antwerp; brick-kilns; tanning. Pop. 17,200.

Boone, city, Iowa, U.S.A., 38 m. n.w. of Des Moines; bricks, hosiery; coal and lumber exported. Pop. 12,000.

Booth, co. bor., Lancs, England; continuous with Liverpool; chemicals; jute; engineering works; timber yards. Pop. 76,800.

Boppart, tn., Rhenish Prussia, on R. Rhine, 10 m. s. of Coblenz; fruit and wine; tourist centre. Pop. 6,500.

Borås (bo'ras), tn., Sweden, 45 m. e. of Göteborg; spinning and weaving. Pop. 35,000.

Bordeaux (bôr-dô'), tn. and port, Gironde, France, on l. bk. of R. Garonne; in midst of great wine, fruit, grain, and timber-producing country; trading centre; exports wine, brandy, hides, wool, fish, fruits, potatoes, sugar, oil, resins; univ. Pop. 256,000.

Border Province of GRENZMARK POSEN-WESTPREUSSEN, prov. of Prussia. See GRENZMARK.

Bordighera (bôr-di-gê'ra), tn., Riviera, Italy, 2 m. n.e. of Nice; winter resort. Pop. 5,500.

Borgå. See PORVÖÖ.

Bor'go Pass, mt. pass in Carpathians, near frontiers of Bukovina, Transylvania, and Romania.

Borkum, E. Frisian isl.; belongs to Prussia; low and sandy; summer resort. Area, 12 sq. m.; pop. 3,000.

Borneo, large isl., Malay Archipelago, immediately n. of Java; bounded e. by Celebes Sea, Macassar Strait; s. by Java Sea; w. and n.w. by China Sea; length, 830 m.; breadth, 600 m. About two-thirds of island in s.e. and s. belong to the Dutch, while n. and n.w. (states of N. Borneo, Brunei, and Sarawak)

belong to Britain. Mountain ridge runs from n.e. to s.w., height ranging from 8,000 ft. in n.e. to 3,500 in s.w.; in extreme n., Kinabalu range reaches height of 13,700 ft.; interior mountainous, with rich river valleys and marshy plains; principal rivs., Barito, Kapuas; few lakes; coast is low and swampy. Best bays are in Brunei and Brit. N. Borneo. Rainfall is heavy. Forests produce ironwood, teak, sandalwood, ebony, indiarubber, sago, camphor, pepper, cloves, nutmegs, cinnamon, ginger, betel nuts, coco-nuts, gambier, bamboo, canes. Rice, sugar-cane, sago, tapioca, coffee, earthnuts, indigo, maize, hemp, cotton, tobacco, are cultivated; minerals, except coal, only in traces as yet. Edible birds' nests, trepang, pearls, and tortoise-shell are obtained. Exports are pepper, spices, drugs, timber, canes, gutta-percha, indiarubber, and many of above productions; imports general goods, clothing, machinery, hardware, opium, rice. Area, 289,860 sq. m.; pop. c. 3,000,000.

BRITISH NORTH BORNEO is mainly hilly; rubber, tobacco, pepper, gambier, sugar-cane, sago are cultivated; exports: rattans, nuts, edible birds' nests, rubber; minerals not developed. Chief tn., Sandakan. Area, 31,106 sq. m.; pop. 257,800.

DUTCH BORNEO, largest and most important part. (Products, etc., described under Borneo.) Chief tn., Bandjermasin. Area, over 200,000 sq. m.; pop. c. 2,000,000.

Bornholm, Dan. isl., Baltic Sea; kaolin, freestone; fisheries; flax, hemp, oats. Chief tn., Rønne. Area, 225 sq. m.; pop. 44,000.

Bornu (bôr-noo'), state, Nigeria, Africa, w. and s. of Lake Chad; surface flat; branches of Komadugu R. flow to Lake Chad; climate very hot and unhealthy; produces indigo, maize, millet, cotton, ground-nuts; imports calico, sugar, salt. Chief tns., Kuka and Maiduguri. Area, c. 50,000 sq. m.; pop. c. 4,000,000.

Borodino (bôr-ô-dê'nô), vil., Russia, on trib. of Moskva R., 70 m. w. of

Moscow; French victory over Russians in 1812 led to fall of Moscow.

Boroughbridge, mkt. tn., W. Riding, Yorks, England, on R. Ure, 11 m. by rail N.E. of Harrogate; megalithic monuments. Pop. 800.

Borrome'an Islands, four small islands, Lake Maggiore, Italy; Isola Bella has an Italian 17th cent. baronial palace; Isola Madre, a botanical garden.

Borrowdale, picturesque valley, Cumberland, England, s. of Derwentwater; slate quarries.

Borrowstounness. See **Bo'NESS**.

Bos'cobel, par., Shropshire, England, 6 m. N.E. of Shifnal; contains house where Charles II. hid after Worcester (1651).

Bosham (*bo'sam*), vil. and par., w. Sussex, England, $3\frac{1}{2}$ m. w. of Chichester; oyster beds; fishing. Pop. (par.) 1,560.

Bos'nia and Hercegovina (*her'tse-go-vi-na*), dist., Yugoslavia; Dinaric Alps run from N.W. to S.E., surface sloping thence N.E. to Sava basin, S.W. to Adriatic. Hercegovina, in s., is bare and rocky; Bosnia, to N., has mt. forests and fertile valleys; chief rivs., Save and its affluents; large part of surface wooded—lime, beech, oak, pine, larch. Great majority of population are engaged in agriculture; chief crops: tobacco, grain, fruits, beet, flax, hemp; cattle, sheep, swine, horses, mules are largely raised; wine is made; anthracite and iron ore mined. Exports include timber, fruit, coal, iron, chemicals, live-stock; imports include oils, coffee, wool, cottons, silk, rice, paper, leather, glass, hardware, machinery, soap. Cap. of Bosnia, Sarajevo; of Hercegovina, Mostar. Area, 19,768 sq. m.; pop. 1,890,000.

Bos'porus, or **Bosphorus**, strait (17 m. long and $\frac{1}{2}$ m. to $2\frac{1}{2}$ m. wide) between Black Sea and Sea of Marmara.

Bos'ton. (1) Port and mkt. tn., Lincolnshire, England, on R. Witham; deep-sea fishing; manufacture of agricultural implements and oilcake. Pop. 16,600. (2) Port, cap. Massachusetts,

U.S.A., on Boston Harbour, at mouth of Charles and Mystic rivs. Boston is a great riv. centre; number of lines of steamers ply regularly to foreign ports; has excellent harbour accommodation and a good system of street rlys. and subways. Chief industries: printing, textiles, boots and shoes, confectionery. Imports include wool and woollens, chemicals, iron and steel manufactures, wood, leather, fruit, fish, paper; exports provisions, live cattle, bread-stuffs, cottons, leather goods, wood, iron and steel manufactures, spirits; noted educational centre; has famous library, univ., medical school of Harvard University, fine arts school, etc. Pop. 787,000.

Botany Bay, bay and suburb of Sydney, New South Wales; received its name from the richness of its flora; original landing-place of convicts from Britain; now a popular seaside resort. Pop. 7,200.

Both'nia, GULF OF, northern arm of Baltic Sea. See **BALTIC SEA**.

Both'well, tn. and par., N. Lanarkshire, Scotland, 8 m. S.E. of Glasgow; coal mines and freestone quarries; iron and steel works. Pop. (par.) 60,900; (tn.) 3,500.

Botosani (*bo-to-shā'ni*), chief tn. of dist. of same name, Romania, 50 m. S.E. of Cernauti; starch and flour mills. Pop. 33,000.

Bot'trop, tn., Westphalia, Prussia, 6 m. N.W. of Essen; coal mines. Pop. 82,000.

Bouches-du-Rhône (*boosh-doo-rōn'*), dep. S.E. France, at mouth of R. Rhone; w. part consists of marshy plain (Camargue), which includes Rhone delta; e. part is hilly; wheat, oats, olive trees, vine, almonds, mulberry are cultivated. Industries: pottery, silk, soap. Chief tn., Marseilles. Area, 2,025 sq. m.; pop. 930,000.

Bougainville (*boo-gin-vē'*), largest of Solomon Islands, Pacific Ocean; timber. Area, 3,500 sq. m.; pop. 46,000.

Bougie (*boo-zhē'*), port, Algeria; at one time greatest commercial centre

N. African coast; exports oils, wax, hides, wool. Pop. 16,000.

Bould'er. (1) Tn., Colorado, U.S.A., 30 m. N.W. of Denver; seat of Colorado Univ.; gold and silver; health resort. Pop. 11,000. (2) Tn., W. Australia, close to Kalgoorlie; largest gold-mining centre in W. Australia. Pop. 5,900.

Boulogne-sur-Mer or **Boulogne** (*boo-lôn'y-sur-mâr*'), port, Pas-de-Calais, France, 130 m. N.W. of Paris, and connected with Folkestone by daily cross-Channel service; divided into Haute-Ville and Basse-Ville; harbour, recently enlarged, is great port for herring and cod fishing; cement, steel pens, ropes, chocolate, boots and shoes are made; exports raw silk, wine, brandy, fruit, potatoes, poultry; imports woven goods and machinery. Pop. 76,000.

Boulogne-sur-Seine (*boo-lôn'y-sur-sîn*'), suburb of Paris, with 'Bois de Boulogne,' a famous pleasure ground and public park (2,158 ac.), containing zoo and racecourses of Longchamps and Auteuil. Pop. 68,000.

Bourbon, ISLE. See RÉUNION.

Bourbonne-les-Bains (*boor-bôn-lâ-bên*'), tn. and health resort, in Haute-Marne, France, 30 m. S.W. of Chaumont; hot mineral springs; trade in timber, plaster. Pop. 2,600.

Bourg-en-Bresse (*boorg-an-bres*'), cap. Ain, France, 38 m. N.E. of Lyons; rly. jn.; copper ware, pottery, tallow; dist. famous for poultry. Pop. 16,000.

Bourges (*boorzh*), tn., cap. Cher, central France; govt. arsenal and gun foundry; breweries, leather, cutlery, biscuits; remains of Roman ramparts. Pop. 36,000.

Bourget (*boor-shî*'), LAC DU, largest lake in France, dep. Savoie; 758 ft. above sea-level; connected with R. Rhone by Canal de Savières. Area, 16 sq. m.

Bourget, Lx. tn., outskirts of Paris; air-port for cross-Channel service.

Bourke, tn., New South Wales, Australia, on R. Darling; copper ore; trade in tinned meat; irrigation works. Pop. 2,600.

Bourne, urb. dist., s. Lines, England, 9½ m. W. of Spalding; remains of castle, once residence of Hereward the Wake. Pop. 4,900.

Bournemouth (*bôrn'muth*), wat.-pl. and co. bor., English Channel, Hants, England; mild climate; beautiful scenery; pier over 1,200 ft. long. Pop. 116,800.

Bourn'ville, model vil., near Birmingham, England; site of Cadbury's chocolate works.

Boussa (*boos'a*), tn., N. Nigeria, W. Africa; Mungo Park drowned in R. Niger here (1806). Pop. 13,000.

Boussu (*boos-su*'), tn., Belgium, 7 m. W. of Mons; coal, iron, copper. Pop. 11,500.

Bovey Tracey (*buv'i*), vil. and par., S.E. Devon, England, 6 m. N.W. of Newton Abbot; lignite deposits; potteries. Pop. (par.) 2,800.

Bowdon (*bô'don*), urb. dist., Cheshire, England, 9 m. S.W. of Manchester, of which it is a residential suburb. Pop. 3,300.

Bowling Green. (1) City, Kentucky, U.S.A., 100 m. S.W. of Louisville; centre of oilfield; evaporated milk. Pop. 12,000. (2) City, Ohio, U.S.A., 20 m. S. of Toledo; oils and natural gas, machinery. Pop. 7,000.

Bowness-on-Windermere (*bô'nes*), par., Westmorland, England; tourist centre; pier for L. Windermere steamers. Pop. 3,800.

Boyaca (*bo-ya-kâ*'), dep., Colombia, S. America; traversed by E. Cordilleras of Andes; forested; has richest emerald mine in world; minerals. Cap. Tunja, 80 m. N.E. of Bogotá. Area, 16,460 sq. m.; pop. (dep.) 657,000.

Boyle, mkt. tn., co. Roscommon, I.F.S., 28 m. S.E. of Sligo. Pop. 2,300.

Boynes, riv., I.F.S.; enters Irish Sea S. of Drogheda; length, 70 m. Scene of battle where William of Orange defeated James II. (1690).

Brabant. (1) Mediæval duchy of Low Countries, corresponding to the modern prov. of North or Dutch Brabant and the Belgian provs. of Brabant and Antwerp. (2) Prov.,

Belgium, between Rs. Meuse and Schelde; industrial and agricultural; thickly populated; cap. Brussels. Area, 1,268 sq. m.; pop. 1,643,000. (3) North, prov., southern Holland; surface flat; heathy and marshy tracts; agriculture and cattle rearing. Chief tn., s' Hertogenbosch. Area, 1,921 sq. m.; pop. 837,000.

Bras (*brach*), or **BRAZZA**, largest of Dalmatian islands, Yugoslavia, in Adriatic Sea; mountainous but fertile; wines, olives, figs, almonds; marble; fisheries. Area, c. 200 sq. m.; pop. 19,300.

Brackley, mkt. tn., Northants, England, on R. Ouse; brewing. Pop. 2,200.

Bracknell, vil. and par., s.e. Berks, England, 4½ m. e. of Wokingham; in anc. Windsor Forest. Pop. (par.) 3,500.

Brad'dock, bor., Pennsylvania, U.S.A., 10 m. s.e. of Pittsburgh; iron and steel manufactures. Pop. 46,000.

Brad'ford. (1) City, W. Riding, Yorks, England, 9 m. w. of Leeds; chief seat of woollen and worsted manufacture; important wool market; silks and velvets also made; good rly. communication; connected with Humber and Liverpool by canal; coal and iron mines, stone quarries in vicinity; engineering. Pop. 298,000. (2) City, Pennsylvania, U.S.A., near N. boundary; oil-wells, machinery. Pop. 17,000.

Bradford-on-Avon, mkt. tn., Wilts, England; rubber industries and bath-stone quarries; famous for woollens. Pop. 4,700.

Braemar', par., vil., s.w. Aberdeenshire, Scotland, alt. 1,100 ft.; health resort; bracing climate; Ben Macdui near by. Pop. of par., 1,000.

Brag'a. (1) Dist., n.w. Portugal; largely pastoral. Area, 1,040 sq. m.; pop. 376,000. (2) Archiepisc. see, cap. of above; cutlery, firearms, felt hats. Pop. 22,000.

Bragan'ça, or **BRAGAN'ZA**. (1) Dist., n.e. Portugal; agriculture; rearing of silkworms; silk manufactures. Area, 2,513 sq. m.; pop. 170,000. (2)

City, episc. see, cap. of above; silk, velvet. Pop. 5,800.

Brahmapu'tra ('son of Brahma'), riv., Asia, rising e. of Lake Manasarowar, on tableland n. of the Himalayas in w. Tibet, close to head-waters of Rs. Sutlej and Indus; has course eastward of c. 1,000 m., as Tsangpo, then turns s.e., through Himalayas, and flows through Assam to join R. Ganges. Length, c. 1,800 m. (navigable about 800 m.); drainage area, over 361,000 sq. m.

Braila (*bra-e'la*), tn., Romania, on l. bk. of R. Danube, 12 m. s.s.w. of Galatz, is principal port for the grain trade and has extensive docks; imports coal. Pop. 66,000.

Brain'tree. (1) Mkt. tn., Essex, England, 14 m. w. of Colchester; engineering; silk, crêpe. Pop. 8,900. (2) Tn., Massachusetts, U.S.A., 10 m. s.e. of Boston; leather, shoes, carpets, rubber goods. Pop. 16,000.

Bramhall. See HAZEL GROVE AND BRAMHALL.

Bramp'ton. (1) Mkt. tn., Cumberland, England, 9 m. n.e. of Carlisle; antiquities. Pop. 2,500. (2) Tn., Ontario, Canada, 20 m. w. of Toronto; flour, pumps, gas pipes. Pop. 3,500.

Bran'denburg. (1) Prov. of Prussia, Germany; sandy plain with fertile districts; watered by Rs. Elbe and Oder; numerous lakes; fruit, flax, barley, rye, hemp, tobacco; chalk, alum; sheep rearing; cap. Berlin. Area, 15,072 sq. m. Pop. 2,600,000. (2) Tn. in above, 37 m. w.s.w. of Berlin; on R. Havel; cloth, tinplate, bicycles. Pop. 59,000.

Bran'don. (1) Mkt. tn., Suffolk, England, on R. Little Ouse, on border of Norfolk; flint working in vicinity. Pop. 2,400. (2) City, Manitoba, Canada, 130 m. w. of Winnipeg; flour mills; brickworks. Pop. 16,000.

Brandon and Byshtoles, urb. dist., Durham, England, 3 m. s.w. of Durham; coal-mining. Pop. 17,100.

Brant'ford, city, Ontario, Canada, on Grand R., 25 m. s.w. of Hamilton; ploughs, bicycles, railway material. Pop. 29,500.

Bras d'Or (*brädor*), almost landlocked, tideless gulf, Cape Breton I., Nova Scotia, Canada; divided into Bras d'Or and Little Bras d'Or Lakes, connected by Grand Narrows (bridged by Canadian National Rly.); ship canal connects s. end of Lake Bras d'Or with St. Peter's Bay; lumbering on its shores; productive fisheries.

Brasov (*brä-shov*), or KRONSTADT, tn., Transylvania, Romania, 85 m. N.N.W. of Bucharest; cloth, leather, cement, candles. Pop. 40,000.

Bratislava, formerly PRESSBURG, or POZSONY, tn., Czechoslovakia, on R. Danube, 35 m. E. of Vienna; chief river port and rly. centre of Czechoslovakia; centre of wheat and wine growing dist.; weaving, furniture, chemicals, tobacco, spirits; important annual Orient fair; univ. Pop. 93,000.

Braunsberg (*brownz-berg*), tn. and port, E. Prussia, 38 m. S.W. of Königsberg; some shipping trade; breweries and tanyards. Pop. 14,000.

Braunton, vil. and par., S.W. Devon, England, at mouth of R. Taw, 5½ m. S.W. of Barnstaple; lighthouse and lifeboat station. Pop. (par.) 2,650.

Bray (1) (Irish, *Bri Chualann*), urb. dist., mkt. tn., and wat.-pl., cos. Wicklow and Dublin, I.F.S.; known as 'Irish Brighton'; brewing, fishing. Pop. 8,600. (2) Vil. and par., Berkshire, on R. Thames; referred to in ballad 'The Vicar of Bray.' Pop. of par., 3,800.

Brazil ('red dyewood'). (1) Republic, occupying nearly half of the S. American continent; extreme length, 2,695 m.; breadth, 2,691 m. Brazil is bounded N. by Venezuela, Brit., Dutch, and French Guiana; N.E. and S.E. by Atlantic Ocean; S.W. by Uruguay, Argentina, Paraguay, Bolivia; W. by Peru, Colombia. In basin of R. Amazon are the tropical forests called *selvas*; S.W. is in Rs. Parana-Paraguay basin; both it and Amazon basin have large amount of unhealthy, low-lying, and swampy land; E. and S.E. occupied by great plateau,

with open prairie lands called *campos*; average elevation of plateau over 3,000 ft.; there is a higher tableland cut by deep valleys, having appearance of series of mt. ranges, some reaching height of over 7,000 ft.; these, running parallel with Atlantic, render communication with interior very difficult; large part of country still unexplored. Chief tribs. of R. Amazon are Japura, Rio Negro from N., Jurua, Purus, Madeira, Tapajos, Xingu from S. R. Tocantins flows northward, entering sea near mouths of R. Amazon; and San Francisco R. cuts across eastern ranges, entering sea between Maceio and Aracaju; Paraguay, Taquary, and Parana drain S.; Madeira and rivs. E. of it, and Parana and tribs., flow through tableland and hills, and have many falls and rapids. There are few lakes. Climate varies, with elevation from tropical to temperate.

Flora includes cabinet woods, rubber, palms, mimosa, bombax, lianas, grasses, ferns, orchids, cypresses, acacias, myrtles, coffee, cacao, tobacco, and many other valuable trees and plants. Fauna includes many kinds of birds, butterflies, snakes, monkeys, deer, bats, opossums, jaguars, pumas, sloths, armadillos, rodents. Timber and other vegetation of great tropical forests along Amazon and elsewhere are most valuable, including rubber, fibre plants, nuts, furniture woods, dye woods, drug plants. Cultivated products include coffee, sugar-cane, tobacco, cotton, maté, rubber, balata, cassava, cinchona; cocoa, vines. In S. inland provs. are raised great herds of cattle. Minerals are abundant but undeveloped, except gold; in S. are beds of coal, lignite, bituminous schist, peat; silver, lead, iron, copper, manganese, quicksilver also occur; diamonds are found in Minas Geraes, Bahia, São Paulo, Matto Grosso; other deposits are saltpetre, rock salt, mineral oil, china clay. Brazil is largely agricultural, with only a small proportion cultivated at present, but there are some industries, including

cotton spinning and weaving, woollen manufactures, silk weaving, flourmills, fruit preserving, distilling, brewing. Exports: coffee, rubber, tobacco, sugar, cocoa, maté, gold, hides, cotton, oil-seeds. Chief tns. are Rio de Janeiro (cap.), São Paulo Santos, Bahia, and Pernambuco. Area, 3,285,318 sq. m.; pop. (est.) 36,871,000. (2) Tn., Indiana, U.S.A., 16 m. N.E. of Terre Haute; coal, clay; pig iron; consequent industries. Pop. 9,300.

Braz'os, riv., Texas, U.S.A.; formed by junction of Clear Fork and Salt Fork rvs.; enters Gulf of Mexico. Length, over 900 m.; navigable to Columbia (40 m. from mouth).

Brazza. See BRAC.

Brazzaville, tp., Middle Congo Colony, Fr. Equatorial Africa, on Stanley Pool, R. Congo; headquarters of gov.-gen.; railhead. Pop. c. 5,000.

Breadal'bans, dist., Perthshire, Scotland, comprising many lofty peaks of the Grampians (highest, Ben Lawers, 3,984 ft.) and lochs. Area, 1,020 sq. m.

Brechin (bréch'in), royal burgh, Angus, Scotland, on l. bk. of R. South Esk; 7½ m. w. of Montrose; brown linen, and sailcloth; spinning, bleaching, distilling; 12th cent. cathedral (now parish church). Pop. 6,800.

Breck'enridge, tn., Texas, U.S.A., 85 m. w. of Fort Worth; oil. Pop. 18,000.

Breck'on, or BRECKNOCK, mkt. tn. and co. tn., Breconshire, S. Wales, at the confluence of Rs. Honddu and Usk; lime; flannels, brewing, and tanning. Pop. 5,300.

Breconshire, or BRECKNOCKSHIRE, inland co., S. Wales, bounded by Radnor, Hereford, Monmouth, Glamorgan, Carmarthen, Cardigan; surface mountainous; highest peak, Pen-y-Fan; chief rvs., Wye, Usk; has several lakes and mineral springs. Breconshire produces wheat, oats, barley; timber, dairy produce; cattle and sheep raised; manufactures include woollens, leather, iron goods; minerals include coal, iron, limestone.

Co. tn., Brecon. Area, 733 sq. m.; pop. 57,800.

Breda, tn., N. Brabant, Holland, at junction of Rs. Aa and Merk; carpets, linen, rope, soap; brewing. Treaty signed here between England and Holland, 1667. Pop. 43,400.

Bredbury and Romiley, urb. dist., N.E. Cheshire, England, 2 m. N.E. of Stockport; cotton manufacture. Pop. 10,900.

Bregenz (bril'gents), tn., summer resort, Austria, at s.e. angle of Lake Constance; silk industry; trade in foodstuffs. Pop. 13,000.

Brem'en. (1) Free state of Germany, in basin of lower R. Weser; cattle largely reared; market gardening and fishing. Area, 99 sq. m.; pop. 339,000. (2) City of Germany, cap. of above state, a Hanseatic town on both banks of R. Weser, next to Hamburg among ports of Germany; jute spinning, woollen and cotton goods, shipbuilding; iron foundries, rope making, petroleum refining, distilling, brewing, and sugar refining; great cotton market of Germany; large trade in tobacco and rice; emigration centre. Pop. 293,000.

Brem'erhaven, outport of Bremen (38 m. N.), Germany, at mouth of R. Weser; commodious and well-equipped harbour. Pop. 24,000.

Bren'ner Pass, mt. pass between Austria and Italy, 20 m. s. of Innsbruck; lowest of all the great Alpine passes (4,485 ft.); shortest route between Germany and Italy; railway constructed in 1864-67.

Bren'ta, riv., N. Italy, rises Tirol, enters Adriatic Sea. Length, 106 m.

Brent'ford and Chiswick, urb. dist. and mkt. tn., Middlesex, England; part of Greater London; soap, distilling, rubber industry; market gardens and fruit farms in vicinity. Pop. 62,600.

Brent'wood, mkt. tn., Essex, England, 11 m. s.w. of Chelmsford; breweries, brickworks. Pop. 7,200.

Brescia (bril'sha). (1) Prov., N. Italy, between Tyrol, Lake Garda, and R. Oglio; rice, maize, wine, and

fruits; silk, machinery, and leather. Area, 1,823 sq. m. Pop. 652,000. (2) Tn., cap. of above, 9 m. from Lake Garda; woollens, linens, silks, stockings, iron and steel wares, small arms. Pop. 113,500.

Breslau (*brɛz'lou*), tn., Silesia, Prussia, on R. Oder; most important educational and commercial centre in E. Germany; univ. (1702); machinery, railway carriages; musical instruments, glass, beet sugar, chemical manures. Pop. 557,000.

Bres'say, isl. of Shetland group, 1 m. E. of Lerwick on Mainland; 6 m. long by 3 m. broad; slate and flagstones quarried. Pop. 600.

Brest, chief naval base and arsenal on Atlantic, n.w. France; sea approaches studded with rocks and islands; about 9,000 persons employed in arsenal; fisheries; candles, cork, hats, ropes, soap, and leather; exports vegetables, strawberries, and potatoes. Pop. 68,000.

Brest-Litovsk, fort. tn., Poland, on R. Bug; great rly. centre; grain, wood, cattle, tobacco. Here treaty was signed between Russia and Central Powers (1918). Pop. 29,000.

Bretagne. See BRITANNY.

Brewood (*brood*), tn. and par., Staffs, England, 8 m. N. of Wolverhampton; on canal to Liverpool. Pop. (par.) 2,600.

Briançon (*brɛ-an-son*), tn. and fortress, Hautes-Alpes, s. France, at confluence of Rs. Durance and Guisane; highest town in France (4,335 ft.); silk. Pop. 2,800.

Briansk, tn., Russia, 75 m. n.w. of Orel; great annual fair; tallow; saw and flour mills; iron, machinery, glass, rope. Pop. 24,000.

Bridgend, mkt. tn., Glamorganshire, Wales, 20 m. W. of Cardiff; stone quarries; bricks, tiles; lime burning. Pop. 10,000.

Bridge of Allan, tn., Stirlingshire, Scotland, on Allan Water, 3 m. n.w. of Stirling; mineral springs; residential tn. Pop. 2,900.

Bridge of Weir, tn., Renfrewshire, Scotland, 6 m. W. of Paisley; resi-

dential dist.; calico printing and leather works. Quarrier's Homes in vicinity. Pop. 2,600.

Bridgeport, city, Connecticut, U.S.A., on Pequonnock Creek, Long Island Sound; sewing-machine works; cartridges, carriages, corsets, hardware, and ordnance; electrical machinery. Pop. 147,000.

Bridgeton, city, New Jersey, U.S.A., 37 m. S. of Philadelphia; pig iron and ore; machinery, nails, glass; canned fruit and vegetables. Pop. 16,000.

Bridgetown, port and cap., Barbados, Brit. W. Indies; open roadstead, but small inner harbour. Pop. 13,500.

Bridge'water, tn., Massachusetts, U.S.A., 26 m. S. of Boston; iron-works, brickyards; lumber, shoes. Pop. 9,000.

Bridg'north, munic. bor., Shropshire, England, on R. Severn; manufactures carpets and worsteds. Pop. 5,200.

Bridg'water, port, Somersetshire, England, on R. Parret, 12 m. from Bristol Channel; manufactures bath-bricks; coasting trade. Pop. 17,100.

Brid'lington, munic. bor. and wat-pl., E. Riding, Yorks, England; fine bay and good harbour. Pop. 19,700.

Brid'port, port, Dorsetshire, England; cordage, ropes, and sailcloth; fishing (mackerel). Pop. 5,900.

Brieg (*brig*), tn., Silesia, Prussia, on l. bk. of R. Oder; textiles, metal-work soap; cattle markets. Pop. 27,000.

Brienx (*brɛ-ents*), vil., Berne, Switzerland, on L. Brienz; centre of wood-carving industry; tourist resort. Pop. 2,600.

Bri'erley Hill, urb. dist., Staffs, England, 2½ m. N.E. of Stourbridge; bottle-making, brick-works, potteries; chains and nails. Pop. 14,300.

Brig, or **BRIGUE** (*brig*), tn., Valais, Switzerland, on R. Rhone at N. end of Simplon tunnel. Pop. 3,000.

Brigg, or **GLANFORD BRIGG**, mkt. tn., Lincs, England, 10 m. S. of Barton-on-Humber. Pop. 4,000.

Brig'ham, city, Utah, U.S.A., near N. shore of Great Salt Lake; agricultural centre; canned tomatoes, beet sugar. Pop. 5,000.

Brighthouse, tn., W. Riding, Yorks, England, 4 m. N. of Huddersfield; woollens and worsteds, cotton, carpets; machinery and soap; flagstone quarries. Now includes Rastrick. Pop. 19,800.

Brightlingsea, port, Essex, England, on estuary of R. Colne; oysters; yacht and boat building. Pop. 4,100.

Brighton. (1) Co. bor., Sussex, England, 51 m. S. of London; on Eng. Channel; fashionable holiday resort; mild climate; magnificent promenade (3 m.); fisheries. Pop. 147,400. (2) Tn. and wat.-pl., Victoria, Australia, on Port Phillip Bay. Pop. c. 15,000.

Brignoles (*brèn-yô'*), tn., Var, France, 35 m. E.N.E. of Marseilles; marble quarry; wine, olives, fruits. Pop. 4,500.

Brigue. See **BRIG**.

Brindaban, tn., United Provinces, India, near r. bk. of R. Jumna, 35 m. N.W. of Agra; place of pilgrimage; calico printing. Pop. 18,400.

Brindisi (*brin-dô-sî*), port and archiepisc. see, Lecce, S.E. Italy; only really good harbour between Venice and extremity of S.E. Italy on Adriatic; exports figs, wine, olive oil, coral, and silk; imports coal. Pop. 41,000.

Brionian Islands (*bré-o-né-an*), group of twelve small islands in Adriatic Sea, N.W. of the harbour of Pola, Istria; quarries; Brione (largest), bathing resort.

Brionde (*bré-od'*), tn., Haute-Loire, France, 50 m. W.S.W. of St. Etienne; alt. 1,467 ft.; wine, wood, corn; market gardening. Pop. 4,500.

Brisbane, port, cap. of Queensland, Australia, on riv. of same name, 25 m. from mouth in Moreton Bay; river navigable up to city for ocean-going steamers; shipping trade concentrated in S. Brisbane (dry dock); univ. of Queensland opened here, 1911; preserved and frozen meats, fruit, hides and skins, wool, tallow, and pastoral produce. Pop., with suburbs (10 m. radius), 295,400.

Bris'ol. (1) City, England, in Gloucestershire and Somersetshire, at junction of Rs. Frome and Avon; im-

portant port, with good dock accommodation; large trade with U.S.A., Canada, W. Indies, and other parts of empire; exports coal, salt, tinplates, machinery, cottons, chemical products; imports bananas, provisions, tobacco, timber, grain, oils, marbles, ores. Factories produce chocolate, sugar, leather, chemicals, beer, sailcloth. Univ. (1909). Pop. 396,900. (2) Tn., Tennessee, U.S.A., joined with (3) city, Virginia; rly. centre; flour, tobacco, cheese, and butter. Pop. 22,000. (4) Bor., Pennsylvania, U.S.A., on Delaware R.; cottons and woollens; makes carpets, wallpaper, chemicals, and leather. Pop. 12,000. (5) Port, Rhode I., U.S.A.; famous yacht-building centre; rubber and woollen goods. Pop. 12,000. (6) Tn., Connecticut, U.S.A., 15 m. S.W. of Hartford; clocks; foundries, machine shops, and engine works. Pop. 28,000.

Bristol Channel, arm of Atlantic, extending from mouth of R. Severn to St. George's Channel, separating S. Wales from S.W. counties of England; noted tidal bores; important fisheries.

Bris'tow, tn., Oklahoma, U.S.A., 65 m. N.E. of Oklahoma City; oil; glassworks. Pop. 15,000.

British Central Africa. Term formerly used to denote all Brit. territory in Central Africa (as distinguished from Brit. East, Brit. West, and Brit. South Africa)—viz., Nyasaland and that part of Rhodesia N. of the Zambezi.

British Colum'bia, prov., Dominion of Canada; mostly between Rocky Mts. and Pacific; includes Vancouver and Queen Charlotte Islands. The surface is very mountainous, the Rockies reaching a height of 13,068 ft. in Mount Robson. To the W. of the Rockies are the Selkirk and Gold Ranges, which rise to 11,000 ft.; Cascade or Coast Range, rising to 10,000 ft. Chief rivs. are Columbia, Fraser, Thompson, Peace. Climate varies; mild near coast, dry and hot in S. interior, severe winters in N.; heavily

wooded; important commercial trees are Douglas fir, maple, yellow cypress, red and yellow cedar, white spruce; much pastoral and agricultural land. Chief industries are lumbering, mining, fruit growing, ranching, fishing, canning, fur sealing; very rich in minerals; gold is worked at Cariboo and Kootenay; coal, silver, lead, copper are also mined; the working of cinna-bar, platinum, gypsum, asbestos, plumbago has begun. Cap., Victoria, on Vancouver I.; other tns., Vancouver and New Westminster, on mainland. Area, 355,855 sq. m. Pop. 525,000.

British East Africa, Brit. terr. in E. Central Africa, comprising (1) Kenya Colony and Protectorate. (2) Uganda Protectorate. (3) Zanzibar Protectorate.

British Empire, the unofficial but popular and convenient term for the aggregation of territory under the Brit. crown. These territories are officially classified as follows: (1) Self-governing dominions: (a) Canada, New Zealand, Union of S. Africa, Irish Free State, Newfoundland; (b) Australian Commonwealth and its six component states. (2) Southern Rhodesia, with responsible government, subject to certain powers with regard to native administration reserved to High Commissioner for South Africa. (3) Malta, with responsible government for internal affairs. (4) Colonies without responsible government: (a) with elected House of Assembly and nominated Legislative Council—Bahamas, Barbados, Bermudas; (b) with partly elected Legislative Council (without official majority)—British Guiana, Ceylon, Cyprus; (c) with partly elected Legislative Council (with official majority)—Fiji, Grenada, Jamaica, Kenya, Leeward Islands, Mauritius, Nigeria, St. Lucia, St. Vincent, Sierra Leone, Straits Settlements, Trinidad; (d) colonies and protectorates with Legislative Council nominated by crown—British Honduras, Falkland Islands, Gambia, Gold Coast, Hong Kong, Northern

Rhodesia, Nyasaland Protectorate, Seychelles, Uganda Protectorate; (e) colonies and protectorates with no Legislative Council—Ashanti, Basutoland, Bechuanaland Protectorate, Gibraltar, Northern Territories of Gold Coast, St. Helena, Somaliland, Swaziland; (f) islands under Western Pacific High Commissioner. (5) Mandated Territories. The following ex-German colonies are held by mandate from the League of Nations: part of Togo, Cameroons, and Ger. E. Africa; island of Nauru (S. Pacific); Ger. S.W. Africa (held by Union of S. Africa); Ger. Samoan Islands (held by New Zealand); all Ger. possessions s. of equator except those mentioned above (held by Commonwealth of Australia). The Anglo-Egyptian Sudan is held jointly by Egypt and Britain; the New Hebrides by France and Britain. The extraordinary growth of the empire between 1837 and the present time may be judged from the fact that in the former year the extent of Brit. territory was under 5,000,000 sq. m., and its population less than 200,000,000, about 30,000,000 being whites. Its area now exceeds 13,313,000 sq. m., or about one-fourth of the land surface of the world, and its pop. over 456,000,000 (over 66,000,000 whites)—at least one-fourth of the world's inhabitants.

British Guiana (*gê-â'-na*), Brit. colony, S. America, bordering on Caribbean Sea; surface rises from flat, swampy coast (below sea-level in parts) to Guiana highlands; chief rvs., Essequibo, Berbice, Demerara, Corentyne; climate not unhealthy; products are sugar, rice, coffee, coconuts, balata and rubber, timber, bauxite; 97 m. of railway; cap. Georgetown. Area, 89,480 sq. m. Pop. 308,000.

British Honduras, crown colony, E. coast of Central America, on Caribbean Sea, between Mexican state of Yucatan and Guatemala. The n. is low and full of swamps; s. is mountainous. Staple products are mahogany, logwood, bananas, cacao, plan-

tains. Climate generally damp and hot, but not unhealthy. Cap. and chief port is Belize. Area, 8,598 sq. m.; pop. 49,000.

British Isles, THE, archipelago on the continental shelf w. of the continent of Europe; separated from Continent by North Sea, Strait of Dover, and the English Channel; consist of two large islands and some 5,000 small islands and islets. The largest isl. is Great Britain (England and Wales, Scotland); the other large island is Ireland (Northern Ireland and Irish Free State). Among single islands are Isle of Man, Anglesey, and Isle of Wight; amongst the groups are Orkney and Shetland Islands (to n.) and Hebrides (to w. of Scotland); Scilly Islands (s.w. of England). The Channel Islands, geographically French, belong to Britain. Total area, 120,882 sq. m.; pop. 49,000,000.

British North Borneo. See BORNEO.

British West Indies. See WEST INDIES.

Brit' on Ferry, tn., Glamorganshire, Wales, 7 m. E. of Swansea; extensive steel and iron works. Pop. 9,100.

Brit' tany, or BRETAGNE, former prov., France, now the depts. Ile-et-Vilaine, Côtes-du-Nord, Finistère, Morbihan, and Loire-Inférieure; peninsula bounded n. by Eng. Channel, w. by Atlantic, s. by Bay of Biscay; coast deeply indented; surface mountainous; fishing and farming are the main industries. Area, 13,643 sq. m.; pop. 3,063,000.

Brive (brév), or BRIVE-LA-GAILLARDE, tn., Corrèze, France, on R. Corrèze, trib. of R. Dordogne, in fertile, picturesque district, producing early vegetables, truffles, wine, *pâté de foies gras*. Pop. 20,000.

Brix' ham, port and mkt. tn., on Tor Bay, Devonshire, England; important trawling centre; some coasting trade. Pop. 8,100.

Brix' ton, dist. of S. London; in metropolitan bor. of Lambeth. Pop. 76,000.

Brno (bur'no) or BRÜNN, tn., cap.

of Moravia, Czechoslovakia; woollen factories; machinery, brewing, distilling. Pop. 222,000.

Broach. (1) Dist., Gujarat, Bombay, India; broad alluvial plain of Lower Nerbada; cotton, wheat. Area, 1,468 sq. m.; pop. 307,700. (2) Chief tn. of above, 35 m. n. of Surat; cotton factories. Pop. 43,000.

Broad Arrow, tn., W. Australia, 24 m. n.w. of Kalgoorlie; centre of goldfields. Pop. of dist. 3,000.

Broads, THE, series of picturesque shallow fresh-water lakes in Norfolk (mainly) and in Suffolk, largest being Hickling (400 ac.); 200 m. of navigable water in dist.; famous for yachting, fishing, and fowling.

Broadstairs, eccles. par. and wat.-pl., Isle of Thanet, Kent, England. Pop. 12,700.

Broad' way, par. and vil., s.e. Wores, England, 5 m. s.e. of Evesham; at base of Cotswold Hills; artists' resort. Pop. (par.) 1,860.

Brock' en, central summit of Harz Mts., N. Germany; alt. 3,733 ft.

Brock' enhurst, par. and vil., s.w. Hants, England, 4 m. n. of Lymington; in New Forest. Pop. (par.) 2,160.

Brock' ton, city, Massachusetts, U.S.A., 20 m. s. of Boston; large shoe factories; machinery, tools. Pop. 64,000.

Brock' ville, riv. port, Ontario, Canada, on St. Lawrence R., 60 m. s. of Ottawa; farming implements; motor boats; edge tools. Pop. 10,000.

Brod, tn., Slavonia, Yugoslavia, on R. Sava; riv. port; corn, wine, fruit, wood. Pop. 10,600.

Brod' ick, par. and tn., Isl. of Arran, Buteshire, Scotland; seaside resort. Pop. of par. 1,760.

Broken Hill. (1) Tn., in w. of New South Wales, Australia, in rich silver-mining dist.; zinc. Pop. 24,000. (2) Tn., N. Rhodesia, 320 m. n.e. of Livingstone; centre of rich mining dist.

Bromberg. See BYDGOSZCZ.

Brom' ley, mkt. tn., Kent, England;

residential centre for Londoners; part of Greater London. Pop. 45,300.

Broms'grove, mkt. tn., Worcestershire, England, 12 m. s.w. of Birmingham; nails and buttons. Pop. 9,500.

Brom'yard, urb. dist., n.e. Herefordshire, England, 11 m. s.e. of Leominster; Norman church. Pop. 1,600.

Bronx, THE, most northerly of the five boroughs comprising New York city, U.S.A. Area, 39½ sq. m.; pop. 732,000.

Brook'lands, noted motor track, w. Surrey, England, 1 m. s. of Weybridge.

Brook'line, tn., Massachusetts, U.S.A.; residential suburb of Boston. Pop. 47,000.

Brook'lyn, bor. of New York city, western end of Long Island and connected with mainland by bridges; favourite residential quarter; U.S. navy yard; important trading and manufacturing centre; flour mills, sugar refineries, brass works, and breweries. Pop. 2,018,000.

Broome, port, Dampier Land, n.w. coast, W. Australia; pearl fishing. Pop. 900.

Broseley, tn., Shropshire, England; pottery; part of Wenlock famous for clay tobacco pipes. Pop. 3,000.

Broughty Ferry (*braw'te*), par. and tn., Angus, Scotland, on Firth of Tay; part of city of Dundee; wat.-pl. Pop. 5,300.

Brown, MOUNT, peak, Rocky Mts., Canada, near source of Rs. Fraser and Columbia; alt. 9,055 ft.

Brown'hills, urb. dist., Staffs, England, 6 m. w. of Lichfield; important coal-mining centre. Pop. 18,400.

Browns'ville, city and riv. port, Texas, U.S.A., near mouth of Rio Grande; important market for livestock, sugar-cane, grape fruit, vegetables. Pop. 18,000.

Brox'burn, tn., W. Lothian, Scotland, 10½ m. w. of Edinburgh; coal mines; centre of shale-oil industry. Pop. 8,300.

Bray (*broo-ä'*), tn., Pas-de-Calais,

France, 5 m. s.w. of Bethune; in rich coal-mining district. Pop. 31,000.

Bruchsal (*brooch'säl*), tn., Baden, Germany, 14 m. n.e. of Karlsruhe; tobacco, paper, machinery, beer. Pop. 16,000.

Bruges (*broosh*), city, cap. of Flanders, Belgium, 63 m. n.w. of Brussels and 8 m. inland from North Sea; connected by ship canal with Zeebrugge; famous belfry, 353 ft. high; chief industry, lace making. Pop. 52,000.

Brunel (*broo-ni'*), state, Brit. protectorate, n.w. Borneo; exports sago, wild rubber, hides and horns; oil is found. Chief tn., Brunel. Area, c. 2,500 sq. m. Pop., state, 25,500; tn. 12,000.

Brun'ig Pass (3,396 ft.), pass leading from Bernese Oberland to Unterwalden, Switzerland.

Brünau. See BRNO.

Brunsbüttel (*broons'boo-tel*), tn. and port, Schleswig-Holstein, Germany; w. terminus of the North Sea-Baltic canal. Pop. 7,800.

Brunswick. (1) OF BRAUNSCHWEIG, Republic of Germany; Harz Mts. in s.; rvs., Ocker, Weser, navigable; beech, fir, pine, oak forests; coal, iron, agriculture, and cattle rearing important; sugar and chemicals principal manufactures. Area, 1,418 sq. m. Pop. 502,000. (2) Cap. of above; industries include printing, jute spinning, manufacture of chemicals, machinery, sugar. Pop. 147,000. (3) City, s.e. Georgia, U.S.A.; seaside resort; resin, turpentine, lumber products. Pop. 20,000. (4) Tn., Maine, U.S.A., 20 m. n.e. of Portland; paper, pulp, cotton mills. Pop. 8,000.

Brunswick, NEW. See NEW BRUNSWICK.

Brusa or **BURSA** (*broo'sa*), tn., Asia Minor, 25 m. from Sea of Marmara; silk, cotton, carpets; iron and sulphur springs. Pop. 61,000.

Brus'sels, or **BRUXELLES**, cap. of Belgium, prov. of Brabant; centre of canal and rly. system; industries: lace, carpets, furniture, bronzes, woollens, cottons, automobiles, leather goods; chief exports: glass, sugar,

coal, candles. Modern town is well laid out, has fine lime-planted boulevards separating it from suburbs, and avenues connecting it with parks and *bois*. Important buildings are town hall, magnificent palais de justice, royal palace, houses of Parliament, three fine old churches, art and natural history museums, univ.; centre of art and music. Pop. (Greater Brussels) 815,200.

Bruton, mkt. tn., S.E. Somerset, England, 10½ m. S.W. of Frome; educational centre; annual cattle show. Pop. 1,725.

Brüz. See **Most**.

Brynmawr (*brin-mawr*) ('great hill'), tn., Breconshire, Wales, 8 m. W. of Abergavenny; extensive iron-works; coal mining. Pop. 7,200.

Bucaramanga (*boo-ka-ra-man'ga*), tn., Colombia, S. America, 185 m. N.N.E. of Bogota; important coffee centre; tobacco, cocoa, cotton; gold, silver, iron; manufactures cigars and cigarettes. Pop. 30,000.

Buch'an (*büch'an*), dist. of N.E. Scotland, now included in Banffshire and Aberdeenshire; coast-line bold, rocky. Chief tns., Peterhead, Fraserburgh.

Buchan Ness, rocky peninsula, Aberdeenshire, Scotland; most easterly point of Scotland.

Bucharest (*boo-ka-rest'*), tn., cap. of Romania, situated in Wallachian plain and traversed by Dimbovitza R. Climate extreme; state univ.; great educational centre. Trade in wheat, maize, timber, petroleum. Varied industries. Pop. c. 800,000.

Buchholz, tn., Saxony, Germany, 18 m. S. of Chemnitz; school of lace making; cardboard boxes. Pop. 9,700.

Buckfastleigh, urb. dist., S. Devon, England, 6½ m. N.W. of Totnes; wool-len factories; restored Saxon abbey. Pop. 2,400.

Buckhaven, tn., Fife, Scotland, on Firth of Forth; forms a burgh with Methil and Innerleven; colliery trade, engineering, flax spinning. Pop. 17,600.

Buckhurst Hill, urb. dist., Essex, England, 10 m. N.E. of London; residential dist.; part of Greater London. Pop. 5,500.

Buck'ie, fishing tn., Banffshire, Scotland, on Moray Firth; saw-mills, distillery; rope and sail yards. Pop. 8,700.

Buck'ingham, munic. bor., N. Bucks, England; agricultural centre; condensed-milk factory, corn mills. Pop. 3,100.

Buckinghamshire, or **Bucks**, co., England; bounded N. by Northampton, E. by Bedford, Hertford, Middlesex, S. by Berkshire, W. by Oxford; surface generally undulating; in S. are Chiltern Hills, which are well wooded, especially with beeches; in centre is Vale of Aylesbury, a dist. noted for dairy produce, ducks, and sheep; drained by R. Thames, which bounds co. on S., and by R. Ouse, Colne, Thame; there are no large towns; manufactures unimportant, include straw-hats, wooden chairs, thread lace, paper. Famous school, Eton, is near southern boundary. Cap. Aylesbury. Area, 749 sq. m.; pop. 271,600.

Buckley, urb. dist., Flint, Wales, 2 m. E. of Mold; coal mining; earthenware. Pop. 6,900.

Budapest (*boo-da-pesh't*), cap., kingdom of Hungary; consists of two tns., Buda and Pest, on opposite banks of R. Danube. Buda (or Ofen) is principal seat of government. Pest is commercial centre, but contains houses of parliament and univ. Budapest contains many mineral springs, and some splendid baths. Industries include flour milling, tanning, brewing, distilling, manufacture of tobacco and leather goods; trade carried on in corn, wine, spirits, cattle. Pop. 1,005,000.

Budaun (*boo'da-on*). (1) Dist., United Provinces, India; level and fertile; rice, sugar-cane, poppy. Area, 2,014 sq. m.; pop. 975,300. (2) Chief tn. of above dist., 27 m. S.W. of Bareilly. Pop. 39,000.

Bud'don Ness, sandy promontory,

Angus, Scotland; military camp is in vicinity.

Bude, or **BUDE HAVEN**, eccles. dist. and small port, N. Cornwall, England; rising seaside resort. Pop. (including Stratton) 3,800.

Budejovice (*bood'ye-yo-vit-se*), formerly **BUDWEIS**, town, S. Bohemia, Czechoslovakia; lead pencils, porcelain, chemicals, beer. Pop. 44,000.

Budleigh Salt'erton, urb. dist., E. Devon, England, $4\frac{1}{2}$ m. E. of Exmouth; wat.-pl.; fishing. Pop. 3,200.

Buenos Aires (*buv'i-nōs i-rās*). (1) Prov., Argentina, S. America; surface is treeless plain, crossed by many streams and dotted with lakes; chief industry, sheep and cattle raising; produces cereals, tobacco, fruits; exports butter, wool, wheat, jerked beef; cap. La Plata. Area, 117,777 sq. m. Pop. (not including town of Buenos Aires) 2,899,000. (2) Cap. and chief port of Argentina, and largest city in southern hemisphere, on r. bk. of La Plata R.; terminus of many rlys.; great manufacturing tn., and centre of inland trade; manufactures cloth, carpets, furniture, cigars, boots, shoes; city regularly laid out, with fine squares and parks. Pop. (est.) 2,030,700.

Buer (*boor*), tn., Westphalia, Prussia, 9 m. N. of Essen; coal mining. Pop. 99,000.

Buffalo, city and port, New York state, U.S.A., at E. end of Lake Erie; terminus of Erie Canal, and a great trading and rly. centre; manufactures iron and steel, flour, grain, and meat products. Grain, flour, live-stock, coal, and lumber are chief articles of commerce. Industries include meat packing, oil refining, brewing, distilling, car and ship building, manufacture of leather, tobacco, clothing; has fine harbour; univ. Pop. 573,000.

Bug (*boog*). (1) Western or Polish Bug, trib. of R. Vistula, rises in E. Galicia, and enters R. Vistula 23 m. N.W. of Warsaw; 450 m.; navigable from Brest. (2) Southern or Black Sea Bug, rises in Volhynia and flows S.E. to

Nikolaiev, where it forms an estuary joining the R. Dnieper; 450 m.; navigable from Nikolaiev to the sea (50 m.).

Builth (*bilth*), mkt. tn., Breconshire, Wales, on R. Wye; chalybeate and sulphur springs. Pop. 1,700.

Buitenzorg (*boi'ten-zorg*), tn., health resort, Batavia, Java; famous botanical gardens and institute. Pop. 46,000.

Bujalance (*boo-ha-lan'thā*), town, Spain, 24 m. E. of Cordova; centre of agricultural trade; tanneries, woollen goods. Pop. 11,000.

Bukhara (*booch-ār'a*). (1) Part of Uzbek rep., U.S.S.R. Rivs. are Oxus, Zarafshan, Surkhob; soil barren, except where irrigated from rivs. W. is hot and dry, with flat surface, fertile through irrigation; produces pasture for stock; cotton, vines; middle is plateau, producing fruits and pistachios; E. is mountainous, valleys yielding cereals, mulberries; sheep, goats, camels, horses, asses raised; silkworms reared. Minerals include salt, sulphur, alum. Area, 83,000 sq. m. Pop. over 1,000,000. (2) Tn., cap. of above, on Transcaspian Rly.; textiles; chief commercial tn. of Central Asia. Pop. 71,000.

Bukovina (*boo-kō-vē-na*) ('beech land'), prov. of Romania; great part occupied by Carpathian Mts.; fertile, extensive forests; cattle, grain, wool, agricultural produce; cap. Cernauti. Area, 4,030 sq. m.; pop. 800,000.

Bulair', Isthmus of, neck of land 5 m. wide between Gulf of Saros (Ægean Sea) and Sea of Marmara, connecting Gallipoli peninsula with mainland of Thrace.

Bulandshahr (*boo-lund-shār*). (1) Dist., United Provinces, India; fertile plain; canal irrigation; wheat, maize, barley; cotton and sugar-cane. Area, 1,904 sq. m.; pop. 1,066,000. (2) Cap. of above, 40 m. S.E. of Delhi; artistic wood carving. Pop. 19,500.

Bulawayo (*boo-lā-nā'yō*) ('place of the killing'), largest town and most important commercial centre, Southern Rhodesia, S. Africa; gold mining; observatory. White pop. 7,650.

Buldā'na, dist., Berar, India; partly forested; wheat, cotton in fertile valleys; chief tn., Buldana, 190 m. w.s.w. of Nagpur. Area, 3,662 sq. m.; pop. 699,000.

Bul'ford, par. and vil., Wilts, England, on R. Avon, 2 m. N.E. of Amesbury; military camp. Pop. (par.) 3,800.

Bulgaria, kingdom, Balkan Peninsula, S.E. Europe; bounded N. by R. Danube, E. by Black Sea, S. by Macedonia and Thrace, W. by Yugoslavia. Drained by R. Maritsa and affluents of R. Danube; crossed by Balkans and Rhodope Mts. In N. between Tirnova and Rustchuk are grass-covered plains. Country is almost entirely agricultural, about two-thirds of population engaged on land. Wheat, the principal product, is largely exported; wine, tobacco, silk also produced. Minerals include coal, lead, copper, zinc, aluminium. Chief manufactures are attar of roses (at Kazanlik), tobacco, flour; fisheries in Danube and Black Sea; exports, cereals, live-stock, attar of roses, rice, silk, wine, tobacco, eggs, skins; railway mileage, 1,651. Chief tns., Sofia (cap.), Philippopolis, Varna and Rustchuk (ports), Slivno. Area, 39,814 sq. m.; pop. 5,483,000.

Bul'li, (1) Coast tn., New South Wales, Australia, 40 m. S. of Sydney; coal-mining dist.; exports steam coal. Pop. 1,400. (2) Pass (1,000 ft.) in Illawarra Mts., leading inland from town.

Bun'bury, port, Wellington, W. Australia, 90 m. S. of Fremantle; outlet for timber, coal, wheat, fruit; holiday resort. Pop. 5,600.

Buncrā'na, mkt. tn. and wat.-pl., Tirconail (Donegal), I.F.S., on Lough Swilly; agricultural centre; linen; salmon and sea fisheries. Pop. 2,300.

Bundaberg, port, Burnett R., Queensland, Australia, 52 m. N.W. of Maryborough; sugarfactories, timber. Pop. 11,000.

Bundelkhand, Agency E. Central India, comprising over twenty Indian states; hilly, with level country in

N.E.; has unexploited mineral wealth; generally level country. Area, 10,118 sq. m.; pop. 1,375,300.

Bundi (*boon'dē*). (1) Indian state, Rajputana, India, 100 m. S.E. of Ajmer; maize, wheat, opium; limestone for building. Area, 2,200 sq. m.; pop. 187,000. (2) Cap. of above. Pop. 19,300.

Bundo'ran, vil., wat.-pl., S.W. Tirconail (Donegal), I.F.S., Ireland; bracing climate; barytes mines in vicinity; pop. 1,300.

Bungay, urb. dist., N.E. Suffolk, England; printing works. Pop. 3,100.

Bunsau (*boon's'lou*), tn., Silesia, Prussia, 25 m. W. of Liegnitz; wool-lens, linens, brown stoneware pottery. Pop. 18,000.

Bur'dekin, riv., Queensland, Australia; Charters Towers on its banks; drains sugar-growing country.

Bur'dwan. (1) Dist., Bengal, India, along r. bk. of R. Hooghly; flat, well-watered plain; silk weaving; indigo; coalfields, ironworks. Area, 2,703 sq. m.; pop. 1,439,000. (2) Tn., cap. of above, 55 m. N.W. of Calcutta; palace of maharajah; tombs and temples. Pop. 35,000.

Burg (*boorg*), tn., Prussian Saxony, Germany, 14 m. N.E. of Magdeburg; cloth, boots; asphalt, starch. Pop. 24,300.

Burgas (*boor-gas*), port, Bulgaria, on Black Sea; exports grain, wool, butter. Pop. 31,000.

Bur'gess Hill, urb. dist., E. Sussex, England, 9 m. N. of Brighton; brick-yards; potteries. Pop. 6,000.

Burgos (*boor-gos*). (1) Prov., N. Spain; E., mountainous; W., part of old Castile tableland; well forested; poor soil; vines, merino sheep. Area, 5,480 sq. m.; pop. 342,000. (2) Tn., cap. of above prov., 80 m. S. of Santander; leather, cloth, hosiery. Pop. 33,000.

Bur'gundy, anc. prov. of E. France; historic cap., Dijon. Soil is fertile; famous for wines and agricultural produce.

Burhanpur (*boor-han-poor*), tn., Central Provinces, India, on R. Tapti, on

border of Bombay; cottons, silks, gold and silver thread. Pop. 36,000.

Buriat Mongol Republic (*boo'ri-at*), rep. of U.S.S.R., E. of L. Baikal, Asia; horses and cattle; rye, wheat, barley; iron, manganese. Chief tn., Verkhne-Udinsk. Area, 167,600 sq. m.; pop. 522,000.

Burley-in-Wharfedale, urb. dist., W. Riding, Yorks, England, 8 m. N. of Bradford; worsted manufacture. Pop. 4,000.

Burlington. (1) City, S.E. Iowa, U.S.A., on Mississippi R.; rly. centre; machinery, furniture. Pop. 27,000.

(2) City and lake port, Vermont, U.S.A., on L. Champlain; lumber centre; packing boxes, refrigerators, spools and bobbins. Pop. 23,000. (3) City and river port, New Jersey, U.S.A., 18 m. N.E. of Philadelphia, on Delaware R.; iron pipes, typewriter ribbons, carbon paper. Pop. 13,000.

Burma, large prov. in E. of Indian Empire, c. 1,200 m. in extreme length, c. 600 in breadth; bounded N. by China, E. by China, Fr. Indo-China, and Siam, S. by Bay of Bengal, W. by Bay of Bengal, Bengal, Manipur, Assam; includes Upper and Lower Burma. Surface is mountainous, with vast forests of teak and bamboo; river plains or deltas at river mouths are only flat parts, and are flooded in wet season; principal mts. are the Patkoi Hills in N., the Kachin, Shan, and Karen Hills in E., Pegu Yoma and Arakan Yoma; chief rvs., Irrawaddy, Sittang, Salween; climate trying; huge rainfall up country. Rice is largely cultivated in both Upper and Lower Burma, and is chief export. Teak, oil tree, ironwood, and palms are among valuable trees, and many fruits are grown, including bananas, pineapples, guavas. Tobacco, tea, cotton, sesamum, beans are cultivated; many varieties of precious stones found; rich ruby mines in upper district beyond Mandalay; sapphires and other gems, jade. Minerals include silver, zinc, copper, tin, petroleum. All these are exported, also rice, teak, bamboo, cotton,

hides, wax, ivory, gum, rubber, oil. People display skill in silver repoussé work, wood carving, lacquer work, silk weaving; imports, European manufactured goods. Chief tns., Rangoon (cap.), Mandalay (native cap.). Area, 262,732 sq. m.; pop. 13,212,200.

Burnett, riv., Queensland, Australia, enters Pacific at Bundaberg.

Burnham, par. and vil., S.E. Bucks, England, 2½ m. E. of Maidenhead; agriculture; brickyards; Burnham Beches, part of anc. forest, now open to public. Pop. (par.) 4,115.

Burnham-on-Crouch, wat.-pl., Essex, England, 11½ m. S.E. of Maldon; boat building. Pop. 3,400.

Burnham-on-Sea, urb. dist., W. Somerset, England, on Bridgwater Bay; holiday resort; fishing. Pop. 5,100.

Burnley, mkt. tn., parl. and co. bor., E. Lancs, England, 29 m. N. of Manchester; extensive cotton weaving, ironfounding, loom making, and coal mining. Pop. 98,300.

Burntisland (*burnt-i-land*), royal and munic. burgh, Fife, Scotland, on Firth of Forth; ferry port; coal exporting, shipbuilding. Pop. 5,400.

Burriana (*boor-re-d'na*), port, Spain, 33 m. N. of Valencia; oranges, grain, wine, oil, melons. Pop. 14,000.

Burry Port, urb. dist., Carmarthen, Wales, on Burry Inlet; seapt.; copper works. Pop. 5,800.

Bursa. See BRUSA.

Burston. See STROKE-UPON-TRENT.

Burton Latimer, urb. dist., Northants, England, 2½ m. S.E. of Kettering; iron ores. Pop. 3,600.

Burton-upon-Trent, munic. and co. bor., Staffs, England, on R. Trent; Eng. metropolis of brewing; engineering, coopering. Pop. 49,500.

Buru (*boo'roo*), or BOEROE, isl., Moluccas, Dutch E. Indies; mountainous and well forested; vegetable oil. Area, 3,400 sq. m.; pop. c. 20,000.

Burnjird (*boo-roo-jird*), tn., Persia, 70 m. S.S.E. of Hamadan; cottons and carpets. Pop. 22,000.

Bury (*ber'i*), mkt. tn. and co. bor., Lancs, England, on R. Irwell; cotton

spinning and weaving, also bleaching, dyeing, and print works; machinery. Pop. 56,200.

Bury St. Edmunds, mkt. tn., w. Suffolk, England; agricultural implements; cattle and corn markets. Edmund, King of E. Anglia, martyred here, 870. Pop. 16,700.

Bush'ey, urb. dist., s.w. Herts, England, 1½ m. s.e. of Watford; Herkomer Art School. Pop. 11,200.

Bushire (*boo-shēr'*), port, Persia, on Persian Gulf; on sandy peninsula; exports opium, carpets, dates, hides; iron. Pop. 20,000.

Bussorah. See BASRA.

Bute (*būf*). (1) Isl., Firth of Clyde, Scotland; separated from Argyllshire by Kyles of Bute; coast rocky, numerous bays; undulating interior; several small lochs; popular holiday resort; excellent crops; cattle and sheep; fisheries; quarries; chief tn., Rothesay. Area, 49 sq. m.; pop. 19,000. (2) Co., Scotland, comprising islands of Bute, Arran, and Cumbræ. Capital, Rothesay. Area, 220 sq. m.; pop. 18,800.

But'ler, tn., Pennsylvania, U.S.A., 28 m. n. of Pittsburgh; oil and natural gas; glass, steel, motor tyres. Pop. 27,000.

Butte (*būf*), tn., Montana, U.S.A., 50 m. s.w. of Helena; mining centre; copper, lead, gold, silver. Pop. 40,000.

Bur'ton, tn., Peak dist., Derbyshire, England; near head of Wye valley; celebrated mineral springs and natural hot baths. Pop. 15,400.

Buzau (*boo-tsou'*), tn., Romania, on r. bk. of R. Buzau, 60 m. n.e. of Bucharest; important rly. centre and market for grain, timber, and petroleum. Pop. 32,000.

Bydgoszcz (*bid'goshch*), or BROMBERG, tn., Poland, 65 m. n.e. of Poznan; agricultural centre, timber. Pop. 88,000.

By'deet, par. and vil., n.w. Surrey, England, 2½ m. s. of Weybridge; brewing. Pop. (par.) 4,170.

By'ker, eccles. par., Northumberland, England; in co. bor. of Newcastle; lead, chemicals, glass, pottery. Pop. 60,000.

C

Cab'ra, tn., Spain, 30 m. s.e. of Cordoba; manufactures bricks and pottery. Pop. 15,000.

Cabre'ra, one of Balearic Islands in Mediterranean Sea. Area, 8 sq. m.

Caccamo (*kā-chā'mo*), tn., Sicily, 22 m. s.e. of Palermo; commands fine view; agate, beryl, jasper. Pop. 12,000.

Caceres (*hā-thā'rās*). (1) Prov., w. Spain, intersected by R. Tagus. Products: n., cereals, fruit, olive oil; s., pigs, sheep; most backward prov. of Spain. Area, 7,667 sq. m.; pop. 410,000. (2) Cap. of above. Pop. 24,000.

Cachar (*kāt-shar'*), dist., Surma valley, Assam, India, between Sylhet on E. and Manipur on w.; rich vegetation. Products: tea, rice, petroleum. Area, 3,654 sq. m.; pop. 327,000.

Cad'der, par. and vil., Lanarkshire, Scotland, on Forth and Clyde Canal; scene of Wallace's betrayal (1305). Pop. (par.) 15,800.

Cadenab'bia, vil., health resort, on w. shore of Lake Como; contains Villa Carlotta (1747), with sculptures by Thorwaldsen and Canova.

Cader Idris ('the chair of Idris'), mt. peak, Merionethshire, Wales, 4 m. s.w. of Dolgelly; precipices, fine views. Alt. 2,929 ft.

Cadiz (*kā-thā'h'*; Eng. *kā'dis*). (1) Prov., s. Spain, bordering on Atlantic and Strait of Gibraltar; mountainous; well watered; one of richest and busiest parts of country; supplies the world with sherry. Area, 2,834 sq. m.; pop. (est.) 348,000. (2) Cap. of above, on peninsula, 95 m. by rail s.s.w. of Seville; suffers from defec-

tive communication with mainland; exports valued at over £1,000,000 annually; wine, salt, corks, tunny fish, olives, and olive oil; graving dock; naval station; varied manufactures. Pop. 76,800.

Cadoxton, par. and tn., Glamorgan-shire, Wales, 7 m. s.w. of Cardiff; coal mines and tinplate works. Pop. 19,300.

Caen (*kān*), chief tn., Calvados, France, on R. Orne; anc. cap. of Lower Normandy; univ. founded by Henry VI. of England; castle and church founded by William the Conqueror; lace, leather, gloves, timber, chemicals. Pop. 46,800.

Caerle'on, vil., Monmouthshire, England, on R. Usk, 3 m. N.E. of Newport; many Roman remains; associated in legend with King Arthur. Pop. 2,300.

Caerphilly, mkt. tn., Glamorgan-shire, Wales, 7 m. N.W. of Cardiff; collieries; noted for its cheese; ruins of fine castle with leaning tower. Pop. 35,800.

Cagayan. (1) Prov., N.E. Luzon, Philippines; very fertile, heavily wooded; tobacco. Area, 5,291 sq. m.; pop. 155,000. (2) Cap., Misamis prov., N.W. Mindanao I., Philippines, on riv. near coast; gold. Pop. 7,000.

Cagliari (*kal-yā're*). (1) Prov., Italy, covering s. half of the island of Sardinia; zinc and lead mining (Iglesias dist.). Area, 5,184 sq. m. (2) Cap. of above prov. and of Sardinia, on s. coast of isl.; good harbour; exports lead, zinc, and salt; wine in vicinity. Pop. 57,200.

Cahir (*kāir*), or CAHIR, tn., Tipperary, I.F.S., on R. Suir; agricultural prod.; remains of monastery; stalactite caverns in neighbourhood. Pop. 1,700.

Cahors (*kā-or'*), tn., cap., dep. Lot, France, on R. Lot, trib. of R. Garonne; on rocky peninsula; riv. here crossed by finest mediæval fortified bridge in France; prod. wine, nuts, truffles. Pop. 10,200.

Caicos (*kī'kos*) and **Turks Islands**, group s. of Bahamas, Brit. W.

Indies; under government of Jamaica; thirty small islands; eight inhabited; salt, sisal fibre, sponges, and turtle-shell; climate hot but healthy. Area, 165 sq. m.; pop. 5,600.

Calman. See CAYMAN.

Cains'cross, par., Glos, England, 1 m. w. of Stroud; makes clothing. Pop. 2,400.

Cairns, seapt., Trinity Bay, N.E. coast of Queensland, Australia; excellent harbour; outlet for mineral fields of Chillagoe and Herberton; prod. sugar, tropical fruits, beef. Pop. 9,000.

Cairo. (1) (*kī'ro*) Cap., Egypt, on R. Nile, 12 m. from apex of delta; joined by rail with Port Said (147 m.) and with Alexandria (130 m.); contains 260 mosques; magnificent mausoleums and tombs; univ. El-Azhar, chief univ. of Mohammedan world; many fine public buildings; native city fast disappearing to make way for hotels, offices, and shops; three railway stations, and three bridges across Nile; electric trams and lighting; suburbs contain large and increasing European pop. Inhabitants include Turks, Berbers, Copts, Arabs, Abyssinians, Jews, and Nubians; manufactures cotton, paper, silk goods, leather. Pop. 1,065,000. (2) (*kā'ro*) City, Illinois, U.S.A., at confluence of Mississippi and Ohio; much riv. commerce; manufactures lumber products, leather goods. Pop. 14,000.

Caist'or-on-Sea, vil., Norfolk, England, 3 m. N. of Yarmouth; holiday resort; ruins of 15th cent. castle; wireless station. Pop. 2,150.

Caith'ness, co., N.E. extremity of Scotland, bounded E. and S.E. by North Sea, W. by Sutherland, and on N. by Atlantic; mostly barren and treeless moors; mountainous in s. (Morven, 2,313 ft.; Scaraben, 2,054 ft.); watered by Wick, Forss, and Thurso rvs.; many lochs; precipitous coast with 'stacks'; climate wet and windy; oats, barley, turnips, potatoes; breeding of high-class pedigree horses and cattle; tweeds, ropes,

agricultural implements, whisky, flagstone pavements; fisheries. Chief towns, Wick and Thurso. Area, 687 sq. m.; pop. 25,700.

Cajamarca (*kā-ha-mar'ka*), city, cap. of prov., N. Peru; woollens and cottons; silver mining and cattle raising. Pop. (city) 12,000.

Calabar, dist., Guinea Coast, W. Africa, now part of Nigeria, extending on E. to borders of Cameroons; includes ports of Calabar, formerly Old Calabar (with native quarter, Duke Town), on Cross R., and New Calabar, c. 100 m. to W., on New Calabar R.; exp. palm oil, kernels, ivory, rubber; missionary station. Pop. (Calabar tn.) c. 50,000.

Calabria, terr. div., S. Italy, peninsula between Gulf of Taranto and Tyrrhenian Sea; covered by extensions of Apennines; heavily forested in centre; fertile valleys and plains yielding grain, rice, fruits, flax; minerals include marble, salt, copper, gypsum; tunny and anchovy fisheries; volcanic; suffered from disastrous earthquakes in 1783, 1905, 1907, and 1908. Largest tn., Reggio di Calabria. Area, 5,819 sq. m.; pop. 1,500,000.

Calahorra, city and episc. see, Logrono, Old Castile, 70 m. N.W. of Saragossa; birthplace Quintilian; cathedral great place of pilgrimage; dist. fertile; fruit, vegetables, and wine. Pop. 10,700.

Calais (*kāl'i*), tn., Pas-de-Calais, France, 21 m. E.S.E. of Dover; chief port for passenger traffic between England and the Continent; harbour accessible to vessels of largest size; old town on island hemmed in by canal and harbour basins, which cut it off from manufacturing quarter of St. Pierre de Calais; chief manufacture is lace; fishing centre. Pop. 60,900.

Calarasi (*kā-lā-rā'shi*), tn. and riv. port, Jalomitsa, Romania, on I. bk. of Borcea arm of Danube, opposite Silistria; in fenlands on railway between Bucharest and Constanta; wheat, linseed, hemp, timber. Pop. c. 13,000.

(3,601)

Calatayud ('castle of Ayub,' its Moorish founder), city, Spain, 46 m. S.W. of Saragossa, on main railway to Madrid; lower and upper (Moorish) towns; interesting churches; castle on rocky eminence; birthplace of Martial; dist. fertile. Pop. 12,000.

Calbayog, tn., Samar I., E. Philippines; has steamboat connection with Manila; hemp and extensive fishing. Pop. 25,300.

Calbe. See KALBE.

Calcutta, cap., Bengal, largest city of India, on I. bk. of Hugli, 85 m. from sea. To S.W. of city proper is Fort William; site of original fort occupied by post office; between the Hugli and Chauringhi Road is the Maidan, a large open space with racecourse, Eden gardens, cricket grounds, and numerous statues of Anglo-Indian notabilities. East of the Maidan is the European quarter. Many important buildings, including Government House, St. Paul's Cathedral, the Victoria Memorial, town hall, Dalhousie Institute, and Bengal Secretariat and University. Near post office is site of Black Hole of Calcutta. To N. extends native city, with narrow, crowded streets. City linked with industrial suburb of Howrah by swing bridges. On E. bk. of river are famous botanical gardens. Calcutta monopolizes export trade of Ganges and Brahmaputra valley, and is the great distributing centre for imports. Exp. jute, tea, hides, skins, oil-seeds, grains and pulses, raw cotton, lac, coal, raw silk, saltpetre, and oils. Docks extend ten miles. Industries may be gauged from exports. Monsoon climate; temp. of hot weather averages 85° F. Average rainfall of 60 in. falls in 118 days. Bulk of inhabitants Hindus, but large numbers of Mohammedans. Pop., with suburbs, 1,327,000. Cap. of India down to 1912, when superseded by Delhi.

Calder (*kaw'der*). (1) EAST, vil., Midlothian, Scotland, 11 m. S.W. of Edinburgh; shale mines and oilworks. Pop. of par. of Kirknewton and East Calder, 3,000. (2) MID, 12 m. S.W. of

Edinburgh, in midst of rich shale oil-field. Pop. 3,200. (3) WEST, 16 m. w.s.w. of Edinburgh; has grown with development of oil shale and coal seams. Pop. 7,800.

Cal'edon. (1) Dist. and tn., s.w. Cape Province, S. Africa; rising health resort. Chief prod. of dist., wool and grain. Pop. (tn.) c. 2,500. (2) Trib. of Orange R., forming the boundary between Basutoland and Orange Free State.

Calo'donia, Roman name for that part of Scotland to the n. of the Roman wall between the Firths of Forth and Clyde. The conventional poetic name for Scotland.

Caledonian Canal, waterway, in counties Inverness and Argyll, joining Lochs Dochfour, Ness, Oich, Lochy, and connecting North Sea with Atlantic Ocean; 60½ m.; used by fishing fleets; favourite tourist route.

Cal'gary, chief city of s. Alberta, Canada, on Bow and Elbow rivers, and on C.P.R.; alt. 3,380 ft.; commercial and industrial centre of a large dist.; irrigation necessary; progressive and rapidly growing town; station of Royal Canadian Mounted Police, and of Hudson's Bay Co.; rly. workshops, lumber mills, tanneries. Pop. 65,300.

Calí (*ka-lé*), tn., Colombia, S. America, on R. Cauca, c. 200 m. s.w. of Bogota; copper and coal mines in neighbourhood, and iron smelted; quinine and much agriculture. Pop. c. 45,000.

Calibo (*ka-lé-vó*), tn., Panay I., Philippines, 25 m. w. by n. of Capiz; cotton and abaca fabrics. Pop. 15,000.

Cal'icut, seapt. tn., w. Madras, Brit. India; gave its name to calico; chief exports, coffee, spices, and timber. Pop. 82,400.

Califor'nia, state, U.S.A., on Pacific coast; bounded n. by Oregon, e. by Nevada, Arizona, s. by Mexico, and w. by Pacific. Surface generally consists of two great mountain systems, the Sierra Nevada in the e. and the Coast Range along the coast, running lengthwise through state, with broad valley between them. In s. the Teha-

chapi range unites the two great systems. The central valley, remarkable for beauty, and called the Great Valley of California, is over 500 m. long and from 40 to 60 m. wide. It is drained by the Sacramento and the San Joaquin, which flow respectively through the n. and s., and, uniting, enter Suisun Bay to n. of San Francisco. The famous Yosemite Valley breaks through the e. branch of the Sierra Nevada. In the s. are depressed desert regions. Climate generally resembles that of the Mediterranean; rainfall decreases from n. to s. Gold, quicksilver, lead, silver, copper, iron, antimony, chromium are found in considerable quantities; petroleum abounds, but there is little coal. Agricultural wealth is remarkable, though in places irrigation is necessary; wheat and barley extensively cultivated; grapes, oranges, lemons, olives, citrons, peaches, pears, cherries, apricots, and other fruits largely produced; sugar-beet, cotton, tobacco, hops also cultivated. There are immense forests, with fir, cedar, pine, and other trees; and lumbering is an important industry. Sheep and cattle raised; silk produced; fisheries important. Industries include canning of fruits and vegetables, meat packing, flour milling, brewing, dairying, distilling, shipbuilding, tanning; exports, fresh, dried, and canned fruit, cereals, timber, wool, sugar, mineral products, petroleum, tobacco. California is connected with eastern states by four railways. Chief towns are San Francisco, Los Angeles, Oakland, Sacramento (cap.), San Diego, Pasadena, San José, Alameda. Area, 158,297 sq. m. (2,645 sq. m. being water); pop. 3,427,000.

California, LOWER, peninsula, a terr. of Mexico, between Gulf of California and Pacific Ocean; mountainous; water and vegetation scarce, but valleys produce cotton, maize, and wheat; horses and cattle reared; gold and silver mining and pearl-oyster fishing. Chief town, La Paz. Area, 55,654 sq. m.; pop. 62,900.

Cal'ander, mkt. tn., Perthshire, Scotland, on both banks of the Teith; centre for Trossachs and a residential town. Pop. 1,600.

Callao (*kalyā'ō*), chief port, Peru, S. America, 7 m. w. of Lima; docks and floating dock; starting-point for Oroya Rly.; exports sugar, cotton, wool, hides, copper, silver. Pop. 35,000.

Cal'ernish, vil. and dist., Uig, Lewis, Scotland; fine Druidical remains.

Calne (*kān*), munic. bor. and mkt. tn., Wiltshire, England, 6 m. E.S.E. of Chippenham; residence of W. Saxon monarchy, 10th cent.; bacon-curing industry. Pop. 3,500.

Cal'shot, seaplane station, Hants, England, on projecting tongue of land at w. of entrance to Southampton Water, 7 m. S.S.E. of Southampton.

Caltagirone (*kal-ta-jir-ō'nd*), tn., episc. see, Catania, Sicily; built on two hills (2,015 ft.) linked by bridge; pottery and artistic statuettes. Pop. 30,800.

Caltanissetta (*kal-ta-nè-sā'ta*). (1) Prov., Italy, in middle of Sicily; sulphur mines from which 500,000 tons exported annually; cereals, wine, olives. Area, 814 sq. m.; pop. 247,400. (2) Episc. see and cap. of above; centre of Sicilian sulphur industry; technical and mining school. Pop. 46,400.

Caluire et Cuire (*kal-wēr ā kuēr*), tn., Rhône, France, on Saône; copper and bronze foundries. Pop. 12,600.

Calumpit (*ka-loom-pēt'*), tn., Bulacan, Luzon, Philippines; in fertile region producing rice and sugar. Pop. 14,800.

Calvados', dep. of Normandy, France, between estuary of Seine on E. and Cotentin on W.; is famous for its pastures; cattle, sheep, and horses; large export trade in dairy produce and cider; fisheries; textiles; seaside resorts. Cap. Caen. Area, 2,197 sq. m.; pop. 390,500.

Calverley (*kā-verli* or *kauw'li*), urb. dist., W. Riding, Yorks, England, 4 m. N.E. of Bradford; woollen manufacture. Pop. 3,700.

Cal'vi, fortified tn. and harbour, N.W. coast of Corsica, France; nearest port of isl. to France (109 m. from Antibes); fishing. Pop. 2,500.

Cam, riv., Cambridgeshire, England, formerly known as Granta, rises near Ashwell (Herts), passes Cambridge, and joins Great Ouse (3½ m. S. of Ely). Length, 40 m.

Camagüey (*kā-mā'gwā*), or PUERTO PRINCIPE, (1) Prov. of Cuba; chief industries, cattle raising and sugar planting. Area, 10,064 sq. m.; pop. 258,700. (2) Cap. of above. Pop. 46,600.

Camargue, LA (*ka-marg'*), isl., France, Rhône delta; marshy, alluvial plains; cereals; vineyards; cattle and sheep rearing; reclamation proceeding.

Cambay. (1) GULF OF, between peninsula of Kathiawar and mainland of Bombay; very high and swift tides; depth decreasing. (2) Indian state, Bombay, India, at head of Gulf of Cambay. Area, 350 sq. m.; pop. 71,800. (3) Port and chief town of above, on Gulf of Cambay; declined since silting up of gulf; agate and cornelian ornaments. Pop. 27,300.

Cam'berley, dist., Surrey, England, 2½ m. S.W. of Bagshot; part of urb. dist. of Frimley and Camberley; military college. Pop. of urb. dist. 16,500.

Cam'berwell, metropolitan and parl. bor., S.E. London; chiefly residential; includes Dulwich; S. London Fine Art Gallery; large parks. Pop. 251,400.

Cambo'dia, kingdom and Fr. protectorate, Indo-China, Asia, bounded N. by Laos and Siam, W. by Siam, E. by Annam, S. by Cochinchina and Gulf of Siam. Mainly alluvial plain of Lower Mekong and upper part of delta of that river; Tonle-sap ('great lake') is regulator for Mekong; has important fisheries. Beyond plain, country traversed by outlying ranges of Pnom-Dongrek; coast low with fringe of islands. Monsoon climate; in dry season temp. averages 77° to 80° F.; soil remarkably fertile; chief

prod., rice, coffee, sugar-cane, pepper, cinnamon, tobacco, indigo, and sugar; cotton industry growing. Iron is only mineral worked. Staple industry fishing. Ruled by native king under Fr. protection. Cap. Phnom Penh. Area, 67,550 sq. m.; pop. 2,535,200.

Cam'borne, mkt. tn., Cornwall, England, 3 m. s.w. of Redruth; tin and copper mines. Pop. 14,200.

Cambrai', tn., Nord, France, on R. Schelde; important junction on main line of Northern Rly.; linen fabrics (cambrics), also copper working, brewing, distilling, tanning, and soap; seat of archbishop. Pop. 24,800.

Cam'bria, Lat. name for Wales, derived from the Celtic Cymru; originally applied to both Wales and Cymric kingdom of Strathclyde; now restricted to the principality.

Cam'bridge. (1) Munic. and parl. bor., Cambridgeshire, England, on R. Cam. Famous as univ. town. Cambridge Univ. became important early in 13th cent.; obtained papal recognition in 1231. Comprises 17 colleges; in addition there are two women's colleges, Girton and Newnham. Pop. 66,800. (2) City, Massachusetts, U.S.A., opposite Boston; seat of Harvard Univ. (1636), Harvard Observatory, Radcliffe Coll., and Prot. Episc. Divinity School; also important industrial interests. Pop. 114,000. (3) Tn., Maryland, U.S.A., on e. shore of Chesapeake Bay; oyster and herring fisheries. Pop. 7,500. (4) Tn., Ohio, U.S.A., 76 m. e. of Columbus; manufactures pottery and glass. Pop. 13,100.

Cam'bridgeshire, inland co., England, bounded n. by Lincoln, e. by Norfolk and Suffolk, s. by Essex and Hertford, and w. by Bedford, Huntingdon, and Northampton. For administrative purposes the northern part forms a separate county, known as the Isle of Ely. Surface is generally flat, except in s.; fen country in n. Chief rivers are Ouse, Cam, Nen, and Lark; intersected by canals. Chiefly an agricultural co., producing wheat, oats, barley, and potatoes;

dairy farming is carried on in s.e. Chief tns., Cambridge (cap.), Newmarket, Wisbech, and Ely. Area, 864 sq. m.; pop. 217,700.

Cambuslang', tn. and par., l. bk. Clyde; residential suburb of Glasgow; contains one of largest steel works in kingdom; coal mining. Pop. (par.) 26,100.

Cambusneth'an, par. and vil., Mid-Lanarkshire, Scotland, 1½ m. n.e. of Wishaw; coal and iron; birthplace of Lockhart, Scott's biographer. Pop. (par.) 36,700.

Cam'den, city, New Jersey, U.S.A., on l. bk. of Delaware, opposite Philadelphia; large commercial and manufacturing centre; iron foundries, chemical and glass works, etc.; shipbuilding. Pop. 117,000.

Camerino (*ka-mà-rè'nò*), tn., episc. see, Italy, 40 m. s.w. of Ancona; seat of 'free' univ. (founded 1727) with 500 students. Pop. 12,000.

Cameroons', former German colony Kamerun, W. Africa, bounded w. by Atlantic, n.w. by Nigeria, n. by L. Chad, e. by Fr. Equatorial Africa. Surface generally is plateau with low-lying coastal strip; highest towards w. Mt. Cameroon is an isolated volcanic mass. Area is drained by Sangha and other rvs. to sea, by Shari to L. Chad, by Sanga to Congo. Coffee, cocoa, tobacco, rice, manioc, yams, and cotton are grown; rubber, palm kernels and oil, ivory, cocoa, copra, and kola nuts are exported; gold and iron are found. From 1884 to 1919 it was a German Protectorate; now divided by mandate of the League of Nations between France and Britain; the share of the latter, British Cameroons, forms part of Nigeria. Area, c. 34,236 sq. m.; pop. 687,000. Chief tns., Victoria and Buea. French Cameroons, included in French Equatorial Africa. Area, 166,489 sq. m.; pop. 1,878,000. Chief tns., Duala and Yaunde.

Campagna di Roma (*kam-pàn'ya*), marshy plain surrounding Rome; length c. 90 m., breadth 25 to 40 m.; almost entirely volcanic; tra-

versed by Tiber; barely one-tenth cultivated because of malaria; used for winter pasturage of sheep; drainage and reclamation, planting of eucalyptus, extinction of mosquito pest, are in progress.

Campania, territorial div. of Italy (comprising provinces of Avellino, Benevento, Naples, and Salerno); dense agricultural pop.; portion drained by R. Volturno richly fertile; Falernian wines; sulphur. Area, 5,276 sq. m.; pop. 3,254,000.

Cam'bellton, tn., New Brunswick, Canada, on shore of upper Chaleur Bay; lumbering, fishing, paper-making. Pop. 6,300.

Campbelltown (*ham'bel-ton*), tn., port, royal burgh, Argyllshire, Scotland, in s. Kintyre; shipbuilding; whisky distilling; fisheries. Pop. 6,300.

Campeche (*ham-pe'che*), or **CAMPEACHY**. (1) State, Yucatan, Mexico, consists of 18,089 sq. m. of low, unhealthy land, producing rice, cotton, tobacco, and logwood (*campeachy* wood). Pop. 76,400. (2) Tn., seapt., and cap. of above, with harbour not suited to large vessels; exports logwood, hemp, cordage, wax, hides, cocoa, and salt; cigars. Pop. 16,900. (3) BAY OF, s.e. part of Gulf of Mexico to the w. of Yucatan peninsula.

Cam'peedown, stretch of dunes in N. Holland, c. 25 m. N. of Haarlem, off which Admiral Duncan won victory over the Dutch under de Winter (Oct. 1799).

Campobasso. (1) Prov., central Italy, forming part of Abruzzi and Molise; sheep and cattle rearing; wheat, maize, wine, olives, hemp; cutlery, paper, hats, and silk. Area, 1,783 sq. m.; pop. 355,300. (2) Cap. of above; cutlery; museum with Samnite weapons. Pop. 16,300.

Campobello. (1) Tn., Girgenti, Sicily; has sulphur mines. Pop. 12,000. (2) Tn., Trapani, Sicily; huge stone quarries. Pop. 10,000. (3) Island, Bay of Fundy, New Brunswick, at the entrance to Passamaquoddy Bay; 8 m. long; summer resort. Pop. c. 1,200.

Campos (*ham'poosh*). (1) Tn., state of Rio de Janeiro, Brazil, connected with Rio de Janeiro by the Leopoldina Railway; well laid out; exports sugar and coffee. Pop. c. 48,000.

Campulung, cap., dep. Muscel, Romania, at foot of outlying Carpathian hills, 80 m. N.W. of Bucharest; summer resort; first cap. of Wallachia. Pop. 18,500.

Ca'naan ('low lands'), name applied first to coast regions of Palestine and dist. drained by R. Jordan; later given to whole of Palestine W. of Jordan.

Can'ada, British overseas Dominion, covering all northern half of North America except Alaska and Newfoundland; includes Arctic archipelago in N. and N.E., stretching towards Pole; bounded N. by Arctic Ocean, E. by Atlantic and Newfoundland, S. by U.S., W. by Alaska and Pacific Ocean.

The E. coast is broken up by Hudson Strait and Bay, James Bay, Gulf of St. Lawrence, Bay of Fundy; importance of first three as harbours lessened by ice in winter, of last by height of tides and strength of tidal currents; W. coast much broken, fringed with islands, providing good, well-sheltered harbours; N. coast commercially useless on account of latitude; S.E. is cut up by chain of great lakes—greatest fresh-water area in world; largest are Lakes Superior and Huron.

Along E. coast, in Labrador, Cape Breton I., and Nova Scotia, are low hills, while S.E. of St. Lawrence basin is bounded by northern extension of Appalachians, with height of c. 4,000 ft. Along N.W. of St. Lawrence basin, of Great Lakes, and of their northern feeders, stretch Laurentian Plateau and Laurentian Range, with heights of from 1,000 to 3,000 ft. From N.W. to S.S.E., towards Pacific coast, run Rocky Mountains and parallel Selkirk and Cascade Ranges, with great intervening valleys and with average height of c. 8,000 ft.; highest peaks, Mts. St. Elias (18,000 ft.), Logan (19,850 ft.), Robson (13,000 ft.). Between Laurentian Range, N. of Lake

Superior, and foothills of Rockies, is enormous stretch of fertile prairie land, important for wheat growing and stock rearing; districts *e.* and *w.* of this are in many parts densely wooded. The *s.* is partly plateau, partly plain, valuable for minerals and fur-bearing animals. The great northern and north-eastern stretch drained by Upper Yukon, Mackenzie, Athabasca, Peace, Coppermine, Great Fish or Back's rvs., flowing to Arctic; Churchill, Nelson, Albany, entering Hudson Bay; *e.*, *s.*, and centre drained by St. Lawrence and its tributaries (Ottawa, etc.), Red R., Assiniboine, Saskatchewan; *s.w.* by Fraser and upper waters of the Columbia. Climate varies greatly; is generally one of extremes. Temp. in centre ranges from 44° to 88° F.; rainfall sufficient practically everywhere. Extreme length *c.* 2,100 m., width 3,600 m.

There are many sources of wealth. Central district is one of the great wheat areas of the world. Cattle rearing, fruit growing, dairying, are important industries; has great quantities of timber; extensive fisheries—lobster, salmon, cod, halibut; mineral deposits are valuable, including gold, coal, copper, nickel, silver, petroleum, asbestos, lead, zinc, iron. Exports include lumber, cheese, cattle, wheat, flour, bacon, fish, apples, skins, furs, sheep, butter, eggs, beef, paper, wood pulp, leather. Railway mileage in 1927 was 40,572, and is rapidly extending; Canadian Pacific Rly., running from Halifax to Vancouver, not counting innumerable branches, has a length of 2,885 m.; the Canadian National Rlys., formed by amalgamation of several companies, include two other transcontinental lines from the Atlantic ports in the *e.* to Vancouver and Prince Rupert in the *w.* Besides navigable rivers and great lakes, there is fine system of canals; shipping is of great importance.

The Dominion was formed by confederation between 1867 and 1873 of all the Brit. N. Amer. colonial posses-

sions except Newfoundland and coast strip of Labrador between Hudson Strait and Gulf of St. Lawrence forming part of that colony. There are now nine provinces (Nova Scotia, New Brunswick, Prince Edward I., Quebec, Ontario, Manitoba, Saskatchewan, Alberta, and Brit. Columbia) and the Terr. of Yukon and N.W. Territories (Franklin, Keewatin, and Mackenzie). There are 22 universities. Inhabitants include Brit., Fr., and other European nationalities, Indians, and Chinese. Cap. Ottawa; largest tn., Montreal. Area, 3,684,723; pop. 9,934,000.

Canadian River, rises near Raton in New Mexico, U.S.A., and flows through Texas and Oklahoma; joins Arkansas R. at Tamaha. Length, 900 m.

Canal Zone, strip of land, 47 m. long by 10 m. wide, extending 5 m. on either side of the Panama Canal from the Atlantic to the Pacific Ocean; bought from Panama (1904) by U.S. for £2,000,000 and annual rental of £50,000. By Panama Act government of the zone vested in several departments all under direction of a governor (first governor, Col. G. W. Goethals, builder of the canal). U.S. have drained swamps, dealt with sewage, and effectively screened all government buildings from mosquitoes, and by so doing have so greatly reduced malaria and other diseases that health rate of zone compares favourably with that of U.S.

Cañar (*kan-yar*), prov., tableland of Ecuador, S. America; agriculture and manufacture of Panama hats; numerous Incal remains. Area, 1,520 sq. m.; pop. 74,000.

Canary Islands, group of volcanic islands belonging to Spain, off *s.w.* coast of Africa, 62 m. from mainland. There are seven large islands, La Palma, Hierro, Gomera, Tenerife, Grand Canary, Fuerteventura, Lanzarote. Climate is delightful; lowest temperature 48°, highest 95° F.; rainfall moderate; favourite place of residence for invalids. Islands produce onions, fruits (bananas, etc.), cochineal,

wine, tobacco, vegetables; all exported. Imports include cottons, woollens, coal, flour, machinery, timber, hardware, etc. Great conical peak of Teneriffe (12,198 ft.) is visible 140 m. off. Chief town is Las Palmas, Grand Canary. Area, 2,807 sq. m.; pop. c. 530,000.

Canberra (*kān'ber-a*), cap. in course of construction for Commonwealth of Australia, on branch of Murrumbidgee R., 150 m. s.w. from Sydney and 75 m. from coast; operations begun 1913; foundation stone laid by Prince of Wales in course of Australian tour (1920). First session in new Parliament House held at Canberra May 9, 1927, which became from that date seat of Australian government. Area, 940 sq. m., including 28 sq. m. at Jervis Bay, its port.

Can'dia, largest town of Crete, on small artificial harbour (much silted); trades in island produce, chiefly olive oil and raisins; ruins of Knossos 3 m. distant. Pop. 25,000 (Greek, with a few Moslems, Jews, etc.). See CRETE.

Can'don, tn., S. Ilocos, Luzon, Philippines; second largest town in prov.; large trade in indigo, rice, and tobacco; cotton, silk, and woollen goods. Pop. 20,000.

Candy. See KANDY.

Canea (*ka-nē'a*), cap. of Crete, on n. coast; cramped by Venetian walls; European quarter 1 m. E.; small artificial harbour (much silted); prod. soap and oil. Pop. 27,600.

Cangas de Tineo (*kāng'-gas dā tē-nē'o*), tn., N. Spain, 38 m. s.w. of Oviedo; woollen and linen industries; leather and pottery. Pop. 23,000.

Canicatti (*ka-nē-kat'ē*), tn., Girgenti, Sicily, 15 m. N.E. of Girgenti; sulphur mines. Pop. 25,000.

Canannore, or KANANUR, seapt., N.W. Madras, India; exports grain, timber, and coconuts. Pop. 27,700.

Cannes (*kān*), health resort, Alpes-Maritimes, Riviera, France, 20 m. s.w. of Nice; sheltered and equable climate; popularized by Lord Brougham, who settled here (1836); many Brit.

visitors; perfume distilling. Pop. 36,800.

Can'nock, urb. dist., Staffordshire, England; tile making, edge tools, coal mining. Pop. 34,600. **Cannock Chase**, between Lichfield and Stafford, formerly wooded dist. devoted to hunting; now a heath, with coal measures and ironstone below the coal.

Cannstatt (*kān-shtāt'*), or KANNSTATT, tn., Württemberg, Germany, on Neckar, near Stuttgart; hot saline springs; railway plant; electrical machinery; chemicals. Pop. c. 27,000.

Can'onbie, vil., Dumfriesshire, Scotland, on R. Esk, 6 m. S.E. of Langholm; coal mines; quarries; remains of priory. Pop. 1,840.

Cañon City (*kān'-yon*), tn., Colorado, U.S.A., at mouth of Grand Cañon of the Arkansas; copper, petroleum, iron, limestone, coal; large zinc-lead smelting works; hot mineral springs and mild climate make it a health resort. Pop. 6,000.

Can'so, STRAIT OF, strait between Nova Scotia and Cape Breton I., connects Chedabucto Bay with Gulf of St. Lawrence (17 m. long, average breadth 2½ m.); only used by coasting vessels.

Canta'brian Mountains, range to the W. of the Pyrenees, extending over 300 m. across the N. of Spain; its highest peak is Peña Vieja (8,743 ft.); richest coal supplies of Spain; crossed by three railways.

Cantag'al'o, tn., Rio de Janeiro, Brazil, 100 m. N.E. of Rio de Janeiro; staple products are coffee and sugar. Pop. 30,000.

Cantal (*kān-tāl'*), dep., Central France, s. portion of Auvergne, derives name from huge volcanic mass occupying centre (Plomb du Cantal, 6,100 ft.); rivers Dordogne and Truyère flow from this N. and W.; prod. rye, buckwheat, potatoes and chestnuts, butter and Roquefort cheese. Natural beauties and mineral springs attract many tourists. Coal, antimony, and marble are found. Cap.

Aurillac, 270 m. s. of Paris. Area, 2,229 sq. m.; pop. 197,000.

Can'terbury. (1) City, Kent, eccles. metropolis of England, a dignity which it has enjoyed since St. Augustine first settled there (597); on riv. Stour; cathedral on site of anc. monastery, completed about 1495; magnificent doubly cruciform edifice, fine examples of Norman and later styles; outstanding historical figure connected with cathedral is Becket (St. Thomas of Canterbury), whose shrine was place of pilgrimage for centuries. Pop. 24,500. (2) Provincial dist. in centre of South Island, New Zealand. Canterbury Plains occupy 3,900 sq. m.; chief wheat and sheep dist. of the Dominion; exports pastoral products. Cap. Christchurch; N. port, Lyttelton; S. Timaru. Area, 13,858 sq. m.; pop. 213,000.

Canton. (1) Cap. of Kwangtung prov., 90 m. up Canton R.; one of the largest and most populous cities of China; there are now old and new cities, western suburbs, island of Honam, and foreign concessions in Shamien and Fati; has perhaps the largest waterpop. of any city; sampans and small craft abode of the Tanka, large-footed race who spend whole lives on water; city lies low and suffers from floods; large and varied industries. Exports silk, leather, matting, tea, tobacco; imports cotton goods, metals, rice, sugar. Shipping trade at Whampoa, 12 m. down Canton R. Pop. (est.) 900,000. (2) City, Ohio, U.S.A., 50 m. s. of Cleveland; chief products are engines, cars, bridges, mill and agricultural machinery, clay, limestone, coal. Pop. 106,000. (3) RIVER or PEARL RIVER, formed by the union of the West (Si), North (Pe), and East (Tung) rivs., Kwangtung, China. Where it narrows are Bogue Forts (taken by British, 1841 and 1856). Whole country to N. very fertile (rice), and intersected by canals and waterways.

Canvey Island, Isl., Essex, England, at mouth of R. Thames; holiday resort. Pop. of urb. dist. 3,500.

Cao-bang (*kā-ō-bang*). (1) Dist., Tongking, French Indo-China; mountainous; tin, galena, and iron ore; forests. Area, 3,000 sq. m.; pop. c. 70,000. (2) Cap. of above, 72 m. N.N.W. of Langson. Pop. c. 6,000.

Cape Bre'ton, island, Nova Scotia, Canada; separated from mainland by Strait of Canso; cut in two by Bras d'Or Lakes and a ship canal; produces grain, timber, coal, salt, marble, limestone, granite; agricultural and lumber products and important fisheries; iron and steel manufactures; shipbuilding; connected with mainland by Canadian National Railway ferry. Chief city, Sydney. Area, 3,120 sq. m.; pop. 130,000.

Cape Coast. See GOLD COAST.

Cape Cod, hook-shaped peninsula, Massachusetts, U.S.A.; cranberry culture; fishing; summer resorts. Cape Cod Canal, 8 m. long, connects Barnstable Bay with Buzzard's Bay, lessening distance between Boston and New York by 70 m.

Cape Colony. See CAPE OF GOOD HOPE (2).

Cape of Good Hope. (1) Promontory, S. Africa; first sighted by Diaz (1486); called 'Cape of Storms'; rechristened by King of Portugal; has a lighthouse. (2) PROVINCE OF THE, formerly CAPE COLONY, part of Union of S. Africa forming extreme S. of African continent, bounded N. by S.W. Africa and Bechuanaland protectorates, N.E. by Transvaal, Orange Free State, Basutoland, Natal, S.E. and S. by Southern Ocean, and W. by Atlantic Ocean. Running parallel with coast, and about 150 m. distant from it, is series of mountains known by various names of Drakensberg, Stormberg, Sneeuwberg, Nieuwveld, Roggeveld, and Kamiesberg Mountains, with elevations of 6,000 to 11,000 ft. From coast surface rises by three terraces divided by subsidiary mountain ranges, large part of third terrace being occupied by Great Karroo, a long, treeless plateau, with bare table-topped hills, sloping from 4,000 ft. on

w. to 3,000 on E., and covered with scrubby karroo bush. The Little Karroo, or second terrace, resembles Great Karroo, and both have great fertility under irrigation. Coast terrace and hilly country in E. have grassy plains and woodlands. To N. of great range of mountains surface slopes to valley of Orange River, and plateau of interior beyond. Eastern part of province has rainfall 25 to 28 in.; centre, S. coast, and Little Karroo, 9 to 25 in.; Great Karroo and country N. and N.W. of it, 9 in. or less. No large river except Orange, which rises in mountains in E. Western districts have winter rains, and eastern summer rains. Mean temperature ranges from 51° to 79° F.

Resources.—Chief source of wealth is diamond mines, centre being at Kimberley in Griqualand W.; rich copper deposits in Namaqualand; manganese and tin near Cape Town; iron, zinc, lead. Sheep and Angora goats are reared in large numbers, producing great quantities of wool and mohair; cattle, horses, mules, donkeys bred; ostrich farming carried on, but now of less importance. Maize, millet, wheat, barley are cultivated; grapes, peaches, apricots, nectarines, figs, oranges, olives, pineapples, bananas, tomatoes, and other fruits and vegetables grown; wine, brandy, and raisins produced; manufactures unimportant; exports include diamonds, wool, mohair, ostrich feathers, copper ore, raw hides, maize; imports include clothing, iron, coal, textiles, hardware, cutlery, tools, provisions, liquors. Irrigation has made some progress. Railway mileage is c. 5,000.

Inhabitants include Dutch, English, and other European nationalities; in western districts are greatest number of Dutch, in eastern of English. The Boers are descended from early Dutch colonists and Huguenot exiles from France. Natives include Bantus or Kaffirs, Hottentots, Bushmen, Griquas, etc. Many of Bantus are people of fine physique; Hottentots are

(3,601)

short, and Bushmen are lowest S. African race. There are also numbers of Indians and Malays, and of 'coloured' people (i.e. half-castes). Chief religion of whites is Protestantism (Dutch Reformed Church, Anglican, Presbyterian, etc.). Education is obligatory for European children.

Cape Colony was united with Natal, Transvaal, and Orange River Colony in 1910, as the Union of S. Africa; and became the Province of the Cape of Good Hope. The English and Dutch languages are both official. Cape Town is cap. of prov. and also seat of Union Parliament. Area, 276,966 sq. m.; pop. 2,782,719, of whom 650,609 are white.

Cape Race forms the S.E. extremity of Newfoundland; lighthouse.

Capernaum (*ka-per'na-um*), scene of large part of ministry of our Lord Jesus Christ, and called 'his own city'; on N. shore of the Sea of Galilee; identified with Tell Hum, one building of which is said to be synagogue in which Christ preached.

Cape to Cairo Railway, a project originally conceived by Cecil J. Rhodes for great trunk line running from Cape Town at S. of continent to Cairo in N. Direct distance is 5,700 m., and as there are some 2,000 m. of waterways, this leaves about 4,000 m. to be covered by rail. The direct railway route from Cape Town runs as far N. as Bukama in the Belgian Congo, while from Cairo the railway runs S. as far as Sennar on the Blue Nile, some 100 m. from Khartoum. Between Khartoum and Bukama the journey is made partly by steamer, partly by road, and partly by rail, the following being the chief places passed: Rejaf, Stanleyville, Ponthierville, Kindu, and Congo. This route follows a fixed time-table.

It is also possible to travel from Cape Town to Cairo entirely on British territory by taking the following route: Cape Town to Broken Hill in N.W. Rhodesia by train; thence by road to S. end of L. Tanganyika; by steamer to Kigoma at N. end of lake;

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by rail through Tabora to Mwanza on L. Victoria; by steamer to Kampala at s. end of lake, and thence by road to Rejaf; thence down the White Nile by steamer to Khartoum, and so by rail to Cairo.

Cape Town, mother city of S. Africa, cap. of prov. of Cape of Good Hope, and seat of legislature of Union of S. Africa; beautifully situated on Table Bay, at foot of Table Mountain; many fine suburbs; also excellent harbour and docks. Notable buildings include old Dutch castle, government house, Houses of Parliament, museum, library, several colleges; mosques; observatory; seat of Anglican and R.C. bishops, and of univ.; exports wool, diamonds, fruit, gold, wine, ivory, hides, skins; imports textiles, hardware, general goods. Inhabitants include Europeans, natives, coloured people (half-castes), Malays, and Indians. Pop. 225,300 (126,700 whites).

Cape Verde, most westerly cape, Africa.

Cape Verde Islands, group 320 m. w. of Cape Verde, belonging to Portugal. Windward group includes Santo Antão, São Vicente, Santa Luzia, São Nicolão, Boa Vista, and Sal; Leeward group, Maio, São Thiago, Fogo, and Brava. Area, 1,475 sq. m.; volcanic; some islands arid, others with abundant rainfall, very fertile; largest island, São Thiago. Chief prod., coffee, castor oil, sisal, mustard, and brandy. Pop. 131,100.

Cap Haitien (*ká'í-té-en*), tn., republic of Haiti, W. Indies, 85 m. n. of Port-au-Prince; good harbour; large export trade. Pop. (est.) 22,000.

Capiz (*ká'péth*). (1) Province, Panay, Philippines, n. coast of the Visayan Sea; semicircular range of mountains encloses low and fertile plain watered by large and navigable R. Capiz; sugar, corn, rice, indigo; cattle and horses; gold and iron. Area, 1,661 sq. m.; pop. 283,900. (2) Tn., cap. of above prov., on l. bk. of Capiz; port of call; rice. Pop. 22,000.

Cap Martin (*asp mar-tan*), headland,

Alpes Maritimes, France, 2 m. from Mentone; pine forest; select winter resort.

Caprera (*ka-prá'ra*), ('goat island'), isl. off N.E. coast of Sardinia; residence of Garibaldi from 1854 to death (1882).

Capri (*kap'rē*), isl., s. side of Gulf of Naples, Italy; precipitous coasts; two towns, Capri and Anacapri, connected by flight of 784 steps and carriage road; lovely scenery (notably Blue Grotto, rediscovered in 1826); attracts many visitors; fruits, wine, olive oil; fishing; good harbour; imperial Roman residence. Area, 5½ sq. m.; pop. 7,000.

Capua, tn. and archiepis. see, Italy, 20 m. n. of Naples; has 11th cent. cathedral, greatly modernized. Anc. city, 2 m. s.s.e., was once a rival of Rome and long famous for its luxury. Pop. 10,000.

Carabobo, dep., N. Venezuela, S. America; thickly populated in centre and s.w.; coffee, cacao, sugar; cattle and hides are exported from Puerto Cabello. Cap. Valencia. Area, 2,984 sq. m.; pop. 147,000.

Caracas (*ka-rak'as*), cap. of Venezuela, S. America, 8 m. s. of its port, La Guaira (by railway, 2½ m.); seat of archbishop; federal palace, univ., cathedral, museum, theatre, and Yellow House (residence of president); has suffered severely from earthquakes; exports coffee, cacao, tobacco. Pop. 135,200.

Carapegua (*ká-rá-pá-guá'*), tn., Paraguay, S. America, 38 m. s.e. of Asunción; district produces tobacco, sugar, and cotton. Pop. 12,000.

Caravaca, tn., s.e. Spain, 40 m. w.n.w. of Murcia; considerable industrial centre, though lacking railway communication; ironworks and tanneries; jasper quarries. Pop. 16,000.

Carberry Hill, hill, Scotland, 8 m. s.e. of Edinburgh; alt. 400 ft.; here Queen Mary surrendered to Confederate lords (1567); a monument marks the spot. On ridge to n.e. battle of Pinkie was fought (1547).

Car'bondale, city, Pennsylvania, U.S.A., 12 m. N.E. of Scranton; active coal-mining city (anthracite). Pop. 18,600.

Carcagente (*kar-ka-hän'tä*), tn., E. Spain, 25 m. S. of Valencia; dist. fertile; has mulberry and orange groves; rice; silk and linen fabrics. Pop. 13,800.

Car'car, tn., Cebu I., Philippines; active coast trade and fisheries; sugar-cane. Pop. 37,400.

Carcassonne (*kar-ka-son'*), (anc. *Carcaso*), cap. of Aude, S. France; lower town, well built and prosperous, on l. bk. of R. Aude; the upper town (Cité), on hill opposite, is the most perfectly preserved specimen in Europe of a mediæval fortress town; restored (1855-79); double rampart; 54 towers; two fortified gates; wine market; agricultural implements, etc. Pop. 28,900.

Cardenas (*kar-dä'nas*), tn. and port, Matanzas, N. Cuba; well built; has bronze statue of Columbus; export trade in sugar, tobacco, asphalt; good steamer service. Pop. 34,100.

Car'diff, parl. bor. and seapt., on Taff, Glamorgan, Wales. Among outstanding features are several parks, including Cathays Park, in which is Univ. College (one of three colleges of univ. of Wales); magnificent new town hall, munic. buildings, and law courts; offices of Central Board of Education for Wales, borough technical schools, and Baptist theological coll. Great manufacturing and trading centre; exports enormous quantities of coal, also iron, tinplate, etc.; industries include shipbuilding, smelting, iron and steel works, brewing, manufacture of chemicals; imports ores, provisions, live cattle, esparto; has large cold-storage accommodation and magnificent docks. Pop. 223,600.

Car'digan, co. tn. and seapt., Cardiganshire, S. Wales, on riv. Teifi; tile and brick making; ruins of Cardigan Castle. Pop. 3,300.

Car'diganshire, county, S. Wales; bounded by Merioneth, Montgomery, Radnor, Brecknock, Carmarthen, Pem-

broke, and Cardigan Bay; surface generally mountainous, except along coast; highest peak, Plinlimmon; chief rivers, Teifi, Aeron, Rheiddol, Ystwith. Soil is chiefly sandy or peaty loam; produces barley, oats, wheat, and other crops; many cattle and sheep raised; minerals include lead, zinc, copper, slate; manufactures gloves, woollens; chief towns, Cardigan (co. tn.), Aberystwith, Lampeter. Area, 692 sq. m.; pop. 55,200.

Car'dross, vil., Dumbartonshire, Scotland, on N. shore of Clyde; here Robert the Bruce died (June 7, 1329).

Card'well, tn., Queensland, Australia, on Rockingham Bay; good harbour; preserved meat and sauces; exports cedar. Pop. 3,500.

Carai (*kar-i'*), formerly NAGY KAROLY, tn., N.W. Romania, near Hungarian border; sawmills; cotton, linen, and tobacco manufactures. Pop. c. 15,000.

Car'fin, vil., Lanarkshire, Scotland, 2 m. N.E. of Motherwell; coal mining; grotto a place of pilgrimage ('Scottish Lourdes'). Pop. 2,200.

Caribbean Sea (*kar-i-bē'an*), between Antilles and Central and S. America; connected by Strait of Yucatan with Gulf of Mexico; formed by subsidence of earth's crust. Area, 7,500 sq. m.; maximum depth, 2,844 fathoms.

Car'ibbee Islands, or LESSER ANTILLES, chain of islands E. of Caribbean Sea; portion of W. Indies; extends from Saba on N. to Grenada on S.

Carigara (*ka-rē-gā'ra*), tn. and port, N. Leyte, Philippines; hemp exported. Pop. 17,500.

Carini (*ka-rē'nē*), tn., Palermo, Sicily; mediæval Gothic castle, also ruins of anc. town. Pop. 14,200.

Carin'thia, prov., S. Austria; mountainous; watered by R. Drava; Alpine lakes; mineral springs; produces lead and iron ores; manufactures iron and steel goods, machinery, rails; rye, oats, and wheat grown; horses, cattle, and sheep raised. Cap. Klagenfurt. Area, 3,680 sq. m.; pop. 370,800.

Carisbrooke, tn., Isle of Wight, England, 1 m. s.w. of Newport; mediaeval stronghold; castle, now in ruins, was prison of Charles I. (1647-48). Pop. 4,700.

Carlingford. (1) Tn., seapt., Louth, I.F.S.; fisheries, especially oysters. Pop. 547. (2) LOUGH, inlet between Louth and Down, Ireland; entrance rocky; shoals.

Carlisle (*kar-lil'*). (1) Co. tn., Cumberland, England; important railway centre; seat of bishop; fine cathedral; iron foundries; textiles. Pop. 57,100. (2) Bor., Pennsylvania, U.S.A., 17 m. s.w. of Harrisburg; seat of Dickinson Methodist Coll. (1783); bombarded by Confederates (July 1863); manufactures boots and shoes, and railway cars; mineral springs in vicinity. Pop. 10,900.

Carlow. (1) Co., Leinster, I.F.S.; bounded Wicklow, Wexford, Kilkenny, Leix, and Kildare; mountainous in s.e.; chief rvs. Barrow and Slaney; chiefly agricultural; dairy farming; corn, flour, butter; 12th cent. cathedral at St. Lazerian. Area, 265 sq. m.; pop. 34,300. (2) Munic. bor., cap. of above, on R. Barrow; brewing, flour milling, dairy produce. Pop. 7,200.

Carlsbad, tn. and wat.-pl., n.w. Bohemia, Czechoslovakia; fashionable resort, noted for mineral springs, of which most remarkable is Sprudel; this has numerous orifices and temp. of 164° F.; mineral waters and Carlsbad salts are largely exported. Pop. 14,800.

Carlsbro'na. See KARLSKRONA.

Carlsruhe'. See KARLSRUHE.

Carlton, urb. dist. and par., Notts, England, 3½ m. n.e. of Nottingham; lace and hosiery. Pop. 22,300.

Carlisle, tn., Lanarkshire, Scotland, 3½ m. n.w. of Lanark; coal and iron; fruit growing and jam making. Pop. 5,400.

Carmarthen, co. tn. and port, Carmarthenshire, Wales, on R. Towy; anc. *Maridunum*; old castle now forms county jail; slates, tinplate; salmon fisheries. Pop. 10,300.

Carmarthenshire, co., S. Wales; is bounded n. by Cardiganshire, e. and s.e. by Brecon and Glamorganshire, s. by Carmarthen Bay and Burry Inlet, and w. by Pembrokeshire. Surface generally mountainous; highest peak, Carmarthen Van (2,632 ft.); chief river, Towy; produces oats, barley; dairy farming carried on; horses, sheep, and cattle raised; coal and lead mining; iron foundries and smelting; tinplate; co. tn., Carmarthen. Area, 919 sq. m.; pop. 179,100.

Car' mel, Mt., mountain ridge, Palestine; runs n.w. from the neighbourhood of Samaria and ends in a bold promontory s. of the Bay of Acre; luxuriantly wooded, and regarded from time immemorial as sacred; scene of deeds of Elijah and Elisha.

Carmo'na, tn., Spain, 20 m. e.n.e. of Seville; Roman and Moorish remains; products include olives, oil, wine, grain, fruit, and cattle. Pop. 22,100.

Carnac, vil., Morbihan, n.w. France, 15 m. s.e. of Lorient; remarkable on account of number of prehistoric stone monuments in its neighbourhood. The monoliths, of granite, are arranged in avenues, and vary in height from 3 to 18 ft.

Carnarvon, parl. and munic. bor. and seapt., cap. of Carnarvonshire, N. Wales; castle founded by Edward I. (1284); birthplace of Edward II.; Princes of Wales were formerly invested in its castle (now a mere shell), the ceremony being revived in 1911, at the investiture of Edward, Prince of Wales; exports slate and copper ore. Tourist centre for Snowdon dist. Pop. 8,500.

Carnarvonshire, co., N. Wales; bounded by Irish Sea, Denbigh, Merioneth, Cardigan Bay, Carnarvon Bay, Menai Strait; surface mountainous; in centre is Snowdon (3,560 ft.); watered by R. Conway and smaller streams; produces oats, barley; cattle and sheep raised; minerals, slate, lead, zinc. Co. tn., Carnarvon. Area, 572 sq. m.; pop. 120,800.

Carnat'le, old subdivision of India,

on Coromandel coast; now part of Madras Presidency; scene of great struggle for supremacy in India between France and Britain in 18th cent.; formed dominions of Nawabs of Arcot, and was conquered by Britain in 1783, being formally annexed to Brit. Empire in 1801.

Carnedd Dafydd, **Carnedd Llewelyn**. See SNOWDON.

Carneg'ie, bor., Pennsylvania, U.S.A., 5 m. s.w. of Pittsburgh; steel and iron works. Pop. 13,000.

Carn'forth, urb. dist., N. Lanes, England, $6\frac{1}{2}$ m. N. of Lancaster; iron smelting; rly. jn. Pop. 3,200.

Carnic Alps. See ALPS.

Carnio'la, former Austrian crown land, now N.W. part of Yugoslavia; climate severe in higher parts, but generally mild; valuable forests; quicksilver; iron, lignite found; household weaving of linen and lace. Chief tn., Ljubljana. Area, 3,845 sq. m.; pop. c. 530,000.

Carnoustie (*har-noos'ti*), coast tn., Angus, Scotland; summer resort; fine golf links. Pop. 4,800.

Carn'wath, vil. and par., Lenarkshire, Scotland, 3 m. N.E. of Carstairs; coal and shale mining. Pop. (vil.) 960.

Caroli'na, or CAROLINAS, old Brit. colony in N. AMERICA, established by grant of Charles II. in 1663, and afterwards divided into the states of N. and S. Carolina (constituted an independent state in 1776). See NORTH CAROLINA and SOUTH CAROLINA.

Car'oline Islands, archipelago, Pacific Ocean, between New Guinea and the Marianas Islands, consisting of about 500 small islands, of which Babelthouap, Yap, Truk, and Ponape are most important; these are volcanic, most of others coral; climate temperate; chief product, copra. Mandated to Japan since the Great War. Area, c. 400 sq. m.; pop. c. 36,000.

Carpa'thian Mountains, great mt. range of S.E. Europe, in Czechoslovakia, Hungary, and Romania; length, c. 880 m.; form watershed between Black Sea and Baltic; chief

ranges are Transylvanian Alps, Central and Little Carpathians, White Mts., Beskids; highest peak, Gerlsdorfer Spitze, in Hohe Tatra (8,787 ft.); covered with timber—oak, beech, fir—up to 4,000 ft.; rich in minerals—coal, silver, copper, lead, iron, salt, petroleum; geological formation chiefly granite, crystallines, and sandstone; numerous small tarns in Central Carpathians; crossed by many passes, including Jabunka and Rothenthurm (Turnul Ros) passes.

Carpenta'ria, GULF OF, large gulf, N. Australia; contains many islands; E. coast discovered by Dutch (1606).

Carpentras (*kar-pon-trā'*), tn., Vaucluse, S. France, 14 m. N.E. of Avignon; walled, with four gates; trade in fruit, preserves; felt hats, silk; very rich city in Roman times. Pop. 8,400.

Carpi (*kar'pā*), tn., episc. see, Emilia, N. Italy, 9 m. N. of Modena; two cathedrals; Renaissance church; silk industries. Pop. 30,700.

Carrara (*ha-rā'ra*), tn., Italy, near E. coast of Gulf of Genoa; famous quarries of marble, mostly white, but also black, yellow, and green. Pop. 52,700.

Carriacou (*har-re-a-hoo'*), largest of the Grenadines, Windward Islands, Brit. W. Indies; building stone; cotton; oyster fishery. Area, 6,913 ac.; pop. 7,100.

Car'rick, southernmost div., Ayrshire, Scotland; anc. regality of county; Prince of Wales is also Earl of Carrick.

Carrickfer'gus, seaport, Belfast Lough, Antrim, N. Ireland; 12th cent. castle; landing place of William III. (1690); flax, linen, and cotton; oyster fisheries. Pop. 4,700.

Carrickmacross', mkt. tn., Monaghan, I.F.S., 13 m. W. of Dundalk; agricultural trade; lace manufacture. Pop. 2,000.

Carrick-on-Shannon, mkt. tn., cap., Leitrim, I.F.S.; mkt. for grain and dairy produce. Pop. 1,000.

Carrick-on-Suir, mkt. tn., Tipperary, I.F.S., on L. bk. of Suir; agricultural

produce; woollens, linens; slate. Pop. 4,700.

Carron. See FALKIRK.

Carsebreck, pond, S.E. Perthshire, Scotland, 11 m. N.N.E. of Stirling; famous for annual bonspiel of Royal Caledonian Curling Club.

Carse of Gowrie, rich alluvial tract, N. bk. of R. Tay, Perthshire and Angus, Scotland; noted fruit dist.

Carshalton, urb. dist., Surrey, England, 3 m. W. of Croydon; ironworks; cocoa, pencils. Pop. 28,800.

Carso (Austrian *Karst*), limestone plateau, Italy, S. of Gorizia, extending behind Trieste and continuing S. almost to the Adriatic Sea; level plain and a low wind-swept tableland strewn with limestone boulders, seamed with deep fissures and covered with rough scrub and great masses of scree; scene of much fighting between Italians and Austrians during Great War.

Carson City, cap. of Nevada, U.S.A.; gold, silver. Pop. 1,600.

Carstairs, par. and vil., Lanarkshire, Scotland, 27½ m. S.W. of Edinburgh; rly. jn. Pop. (par.) 1,800.

Cartagena (*kar-ta-há-na*). (1) Seaport, Murcia, S.E. Spain; naval arsenal; exports metal ores, metals, fruits, esparto grass. Pop. 97,000. (2) Seapt., Colombia, S. America, on Caribbean Sea; burned by Drake (1585); exports include rubber, hides, skins, gold and silver. Pop. 68,000.

Cartágo. (1) Tn., Costa Rica, Central America, at foot of volcano Irazú; coffee, bananas, fruits. Pop. 16,200. (2) Tn., Colombia, S. America, 140 m. W. of Bogotá; cacao, coffee, tobacco. Pop. c. 20,000.

Carter Bar, road summit, Cheviot Hills, between Roxburghshire and Northumberland; important in pre-railway times, now used mainly for motor traffic. Alt. 1,371 ft.

Carthage, famous anc. city, N. Africa, situated N. of Tunis on peninsula jutting into Mediterranean.

Carupano (*ha-roo'pa-nó*), seapt., Venezuela, S. America, 65 m. E.N.E. of

Cumana; commercial centre; cacao, sugar, timber. Pop. 11,000.

Carvin (*kar-tan'*), tn., Pas-de-Calais, France, 10 m. S.S.W. of Lille; distilleries, coal mines, brass foundries. Pop. 11,000.

Casablanca, second city of Morocco, on Atlantic E. coast; one of the most important seaports of N. Africa; exports hides, wool, grain. Pop. 107,000.

Casale Monferrato (*ha-sá-lá mon-fer-rá-tó*), tn., episc. see, Alessandria, Italy, 38 m. E. of Turin; anc. Romanesque cathedral; cement works; syrup from juice of reed. Pop. 34,000.

Casas Grandes, vil., Mexico, 120 m. S.W. of El Paso (New Mexico); remarkable for aboriginal ruins.

Cascade Mountains, mt. range, extending northwards through Oregon and Washington into Brit. Columbia; principal peaks about 14,000 ft.; numerous extinct volcanoes; heavily and extensively wooded; traversed by Fraser, Columbia, and Klamath rivers; name derived from cascades formed by Columbia R. in cutting through range.

Caserta (*há-ser'tá*), tn., episc. see, Italy, 17 m. N.E. of Naples; cathedral and palace; silk works. Pop. 35,200.

Cashel, city, Tipperary, I.F.S.; seat of R.C. archbishop and Prot. bishop; many interesting ruins, comprising 12th cent. cathedral, castle, chapel, round tower, anc. cross, exist on 'Rock of Cashel.' Pop. 3,000.

Cashmere. See KASHMIR.

Casoria (*ha-só-ré-a*), tn., Italy, 6 m. N. of Naples; wine and silk culture. Pop. (comm.) 13,000.

Cas'pe, tn., Spain, on R. Ebro, 50 m. S.E. of Saragossa; sulphur baths in vicinity; oil, silk. Pop. c. 8,000.

Casper, largest city, Wyoming, U.S.A., on N. Platte R.; important oil-refining centre; chief prod. are petroleum, wool, sheep, and cattle. Pop. 23,300.

Caspian Sea, lying between Europe and Asia, and surrounded E., W., and

n. by Russia and s. by Persia; is largest inland sea or salt lake in the world; length, 760 m.; breadth, 130 to 300 m.; area, 170,000 sq. m. It is 90 ft. below sea-level, is tideless, has no outlet; shallow in n. (3 to 12 fathoms), deeper in s. (420 to 516 fathoms); northern part frozen in winter; receives waters of Volga, Ural, Emba, Kur, Terek, Atrek, Gürgen, Sefid-Rud, Aras, and other rivers; is believed to have been formerly connected with Sea of Aral; valuable fisheries—sturgeon, salmon, perch, carp, etc.; important export of caviare and isinglass; canals connecting upper waters of Volga with Lake Ladoga and the Southern Dvina give through communication to Baltic Sea; schemes for connecting Caspian with Sea of Azov and Black Sea not yet materialized; seal hunting is carried on in n.; transport trade in petroleum. Chief port, Astrakhan.

Cassaba, or **KASSABA** (*kas-sá'ba*), tn., Asia Minor, 35 m. e. of Smyrna; cotton, melons exported. Pop. 31,000.

Cassel, or **KASSEL**, cap., Hesse-Nassau, Prussia, on R. Fulda, trib. of Weser; has old palace of electoral princes; museum built (1769), which has fine library; newer part of town regularly laid out with wide streets; important industrial centre; manufactures include machinery, mathematical instruments, textiles, ironware. Pop. 171,500.

Castelbuono (*kas-tel-buoo-ò'nò*), tn., Palermo, Sicily; has mineral springs. Pop. 11,000.

Castellammare del Golfo (*kas-tel-a-má-rá del gòlf'ò*), tn., Trapani, Sicily; olive oil, anchovies, wine. Pop. 21,000.

Castellammare di Stabia (*kas-tel-a-má-rá di stá'bia*), tn., Campania, Italy, on Bay of Naples; mineral springs; popular resort. Pop. 39,200.

Castellon de la Plana (*kas-tel-yon'*). (1) Maritime prov., Valencia, E. Spain; surface mountainous; plain bordering the coast; fisheries; fruit growing; linens, hempen fabrics. Area, 2,495 sq. m.; pop. 307,000. (2) Industrial

tn., cap. of above; porcelain, leather, silk, flax goods of all kinds; watered artificially by Moorish aqueduct. Pop. 34,500.

Castelvetri'no, tn., Sicily, 22 m. s.e. of Marsala; wine, cotton, silk, flax. Pop. 25,000.

Castile (*kás-tél'*), anc. kingdom, central Spain, stretching s. from Bay of Biscay and including upper basins of Douro, Tagus, and Guadiana rivs.; plateau (average alt. 2,500 ft.); climate extreme; much of surface is arid; sheep; wheat in riv. basins; Old Castile includes provs. of Santander, Palencia, Burgos, Lagroño, Valladolid, Soria, Segovia, and Avila; New Castile includes Madrid, Guadala-jara, Toledo, Cuenca, and Ciudad-Real provs. The marriage of Isabella of Castile with Ferdinand of Aragon united Spain (1479); Castilian is literary language of Spain. Area, 53,307 sq. m.; pop. c. 4,500,000.

Castlebar, tn., cap., co. Mayo, I.F.S.; linen goods; agricultural produce. Pop. 4,300.

Castlecary, hamlet, Stirlingshire, Scotland, 6 m. w. of Falkirk; station on Antonine's wall; deposits of silica and fireclay.

Castle Cary, tn., Somerset, England, 12 m. n.e. of Yeovil; horsehair and twine factories. Pop. c. 1,700.

Castle Don'ington, par. and tn., Leicestershire, England, 11 m. s.w. of Nottingham; manufactures hosiery and silk. Pop. (par.) 2,700.

Castle Douglas (*dúg'las*), mkt. tn., Kirkcudbrightshire, Scotland, 4 m. w. of Dalbeattie; manufactures agricultural implements; sheep and cattle markets. Pop. 3,000.

Castleford, urb. dist. and par., W. Riding, Yorkshire, England, 10 m. s.e. of Leeds; glass, chemicals, coal mining. Pop. 21,800.

Castleisland, tn., Kerry, I.F.S., 12 m. s.e. of Tralee; agricultural centre. Pop. 1,300.

Castletknock, par. and vil., co. Dublin, I.F.S., 4 m. n.w. of Dublin; former vice-regal lodge in parish.

Castlemaine, tn., Victoria, Aus-

tralia, 65 m. n.w. of Melbourne; gold mines were the second worked in Victoria; wine and fruit. Pop. c. 7,000.

Castleton, par., vil., Derbyshire, England, 10 m. n.e. of Buxton; ruins of Castle of the Peak (see Scott's *Peveril of the Peak*); fluorspar mines. Pop. 650.

Castletown, tn., Isle of Man; cap. till 1862; anc. castle; public school. Pop. 1,900.

Castres (*kastṛ*), tn., dep. Tarn, France, 40 m. e. of Toulouse; famous 16th cent. Huguenot stronghold; soap, earthenware, leather goods. Pop. 20,800.

Castries (*kās-trē*), port, cap. of St. Lucia, W. Indies; sugar. Brit. naval station; the harbour is one of finest in the W. Indies. Pop. 5,900.

Castro del Río, tn., Andalusia, Spain, 22 m. s.e. of Cordoba; textiles; Moorish castle. Pop. 11,900.

Castrogiovanni (*kas-trō-jō-van'ē*), tn. and episc. see, central Sicily, anc. *Enna*; was seat of worship of Demeter (Ceres), chief deity of anc. Sicily; rock salt. Pop. 26,400.

Castro Urdiales (*has-tro oor-di-d'les*), fishing port, Santander, N. Spain; exports iron ore and tinned sardines. Pop. 11,800.

Castrovillari (*has-trō-vil-lā'rē*), tn., Calabria, Italy, 35 m. n. of Cosenza; anc. Norman castle; cheese; wine. Pop. c. 11,000.

Catalonia, former principality and province, n.e. Spain, now comprising Barcelona, Tarragona, Lerida, and Gerona; surface mountainous and wooded; watered by numerous streams; these, together with a good system of artificial irrigation, render Catalonia chief manufacturing and agricultural region of Spain; called the 'Lancashire of Spain'; produces cereals; cotton, silk, and woollen goods manufactured; coal, copper, zinc, lead, tin. Chief tn., Barcelona. Area, 12,427 sq. m.; pop. 2,345,000.

Catamarca. (1) Andean prov., Argentine Republic; mountainous, with fertile valleys; gold, silver, copper,

lead, iron; maize, wheat, tobacco, cotton. Area, 36,800 sq. m.; pop. c. 120,000. (2) Tn., cap. of above, 230 m. n.w. of Cordoba; cathedral; exports flour, wine. Pop. 13,300.

Catania. (1) Prov. of Italy, occupies middle of e. side of Sicily. Mount Etna fills n.e. quarter, and s. of it is fertile plain of Catania, drained by R. Simeto. Behind these two regions country is mountainous. Produces wheat, olives, wine, oranges, lemons, etc.; sulphur, silk, etc. Area, 1,379 sq. m. Pop. 784,000. (2) Tn. and seaport, cap. of above; cathedral dating from Norman times; rebuilt in 1693, after earthquake; observatory, univ., Roman remains; former Benedictine monastery. Manufactures of textiles; dye works; frequently suffered from earthquakes and eruptions of Etna. Pop. 263,000.

Catanzaro. (1) Prov., Calabria, s. Italy; mountainous; forested, cattle grazing; wine, fruits; silk, velvet. Area, 2,034 sq. m.; pop. 514,100. (2) Tn., episc. see, cap. of above; suffered severely from earthquakes (1783, 1905, 1907); silk, velvet, and woollen fabrics. Pop. 34,300.

Cat'erham and Warlingham, urb. dist., Surrey, England, 7 m. s. of Croydon; Guards' camp in vicinity. Pop. 19,500.

Cathcart, par., Renfrewshire and Lanarkshire, Scotland; residential suburb of Glasgow; engineering, paper works; battle of Langside fought near Cathcart Castle. Pop. 46,300.

Catskill, group of mts. of Appalachian system, New York, U.S.A.; well timbered; precipices, ravines, streams, waterfalls, popular resort; scene of Rip van Winkle's adventures.

Cat'taro. See KOTOR.

Cattégat. See KATTEGAT.

Cat'terick, vil., N. Riding, Yorks, England, on R. Swale, 4½ m. s.e. of Richmond; Roman station on Watling Street; military camp during Great War; race meetings. Pop. 600.

Cauca (*how'ka*), riv., Colombia, S. America; most important trib. of R. Magdalena, joins main river near Tacaloa; beautiful valley; mineral and agricultural wealth. Length, c. 700 m.

Caucasia (*kōk'ā'shā*), general name for a part of the former Russian Empire, s. of and including the Caucasus Mts.; territorial changes followed Russian revolution and Great War; republics have been established in Georgia, Azerbaijan, Daghestan, and Armenia, and various terrs. of U.S.S.R. have been formed.

Caucasus (*kō'kaz-us*), lofty range of mts., Russia, extending from Taman peninsula, between Sea of Azov and Black Sea, to Caspian Sea; total length, 940 m.; forms boundary between Europe and Asia. Highest peaks are Mt. Elbruz (18,465 ft.), Koshtantau (16,875 ft.), Kasbek (16,545 ft.). Range consists of a core of granite and gneiss, flanked by clay slates. Some of highest peaks are volcanic in origin, but there are no active volcanoes, though earthquakes are frequent. The Little Caucasus in Armenia is connected with main range by short Suram range.

Candebec en Caux (*kōd-bek ān kō*), tn. and riv. port, Seine-Inférieure, France, on Seine, 27 m. w.n.w. by rail from Rouen; 15th and 16th cent. church; old-world streets. Pop. 2,000.

Causse (*kōs*), series of limestone plateaus near head-waters of R. Tarn, s. France. Surface pits, subterranean streams, and stalactite caverns abound.

Canterets (*ko-tē-nā'*), picturesque health resort, Hautes-Pyrénées, France, 18 m. s.w. of Bagnères de Bigorre; mineral springs. Pop. 1,000.

Cantía, prov., s. Chile; e. part occupied by cordillera of Andes (active volcano, Llaimas, 9,800 ft.); fruits, cereals, forests. Cap. Temuco, 80 m. n.e. of Valdivia; chief port, Tolten. Area, 6,381 sq. m.; pop. 193,600.

Can'very, riv., s. India, rises in W. Ghats, flows s.e. through Mysore and

Madras, enters Bay of Bengal; forms large delta which is extensively irrigated; falls are used to supply electric power; total length, over 400 m.

Car'a dei Tirre'ni, tn., episc. see, Italy, 6 m. n.w. of Salerno; health resort; silk, woollens, linen, and cotton; Benedictine monastery (1025), famous for its archives, in vil. of Corpo di Cava near by. Pop. 26,700.

Car'an. (1) Co., Ulster, I.F.S.; bounded by Fermanagh, Monaghan, Meath, Westmeath, Longford, and Leitrim; surface undulating; n.w. mountainous; rivs. Annalee, Blackwater, Erne, Woodford; mineral springs; agriculture; distilling. Area, 730 sq. m.; pop. 82,500. (2) Chief tn. of above; ruins of 14th cent. abbey. Pop. 3,000.

Cavite (*ka-ō'tā*), cap., prov. Cavite, Luzon, Philippines, 8 m. s.w. of Manila; chief naval station of archipelago; fortified; dry dock; situated in fertile region, producing rice, sugar, copra, cacao, and coffee. Pop. 22,200.

Caw'dor, vil., Nairnshire, Scotland, 5½ m. s.w. of Nairn; scene of traditional murder of King Duncan by Macbeth (1040).

Cawnpore, chief tn., Cawnpore dist., United Provinces, India, on Ganges; important railway centre; military station; memorial gardens and church commemorate massacre of Europeans by Nana Sahib, July 1857; manufactures cotton, leather, and woollen goods, and has a large trade in grain. Pop. 216,500.

Caxias (*kā-shō-āsh'*), tn., Maranhão, N.E. Brazil, on riv. Itapicuru; cotton and rice. Pop. 25,000.

Cayeune, seapt. and cap., Fr. Guiana, S. America; official centre of Fr. penal settlement; fortified harbour; chief exp. phosphates, hides, cacao, cloves, and gold. Pop. 14,000.

Cayey (*kī-ā'*), tn., Porto Rico, W. Indies, on slopes of Cayey Mts., 30 m. s. by w. of San Juan; summer resort; tobacco and coffee. Pop. 5,800.

Cayman Islands (*kī'man*), three islands, Grand Cayman, Little Cay-

man, and Cayman Perac, Caribbean Sea, N.W. of and under government of Jamaica; discovered by Columbus; turtles; phosphates; coconuts. Pop. 5,300.

Ceará (*thá-a-rí'*). (1) State, N. Brazil; has Serra Grande and Serra Araripe in w.; climate healthy but hot; droughts occur; prod. include coffee, cotton, sugar, wax, rubber, and hides; cattle raised. Area, 57,356 sq. m.; pop. 1,319,000. (2) Or FORTALEZA, cap. of above state, on Atlantic Ocean; principal commercial centre and seaport, though sand bar hampers approach; large trade with Pernambuco in produce of state; well laid out. Pop. 78,500.

Cebu'. See SEBU.

Cedar Rapids, city, Iowa, U.S.A., 110 m. E.N.E. of Des Moines; products include 'Quaker oats', meat products, agricultural machinery, starch, lumber. Pop. 56,000.

Cefalu (*chá-fá-loo'*), tn., episc. see, Palermo, Sicily; 12th cent. cathedral, with mosaics and cloisters; remains of Roman walls and Norman castle; sardine fishing. Pop. 13,200.

Ceglie (*chál'yá*), tn., Apulia, Italy, 19 m. N.E. of Taranto; beautiful position; trade in grain, oil, and fruit. Pop. c. 20,000.

Cehagin (*thá-d'hén'*), tn., Murcia, Spain, 55 m. N.W. of Cartagena; wine, olive oil, hemp, honey, esparto grass (for paper); black marble quarries. Pop. 13,700.

Celaya (*sá-lá'ya*), tn., Guanajuato, Mexico, c. 150 m. N.W. of Mexico City; important silver mines in neighbourhood; carpets; saddlery. Pop. c. 26,000.

Celebes (*sel-é-bez*), isl., Dutch E. Indies, separated from Borneo by Strait of Macassar; great length of coast-line; inhabitants mainly belong to Malayo-Polynesian stock; isl. is traversed by volcanic range; has many lakes; proximity to sea makes climate endurable; wealthiest of Dutch E. Indies; much virgin soil; exports nutmeg, mace, copra, rattans, waxes, gums and resins, ores and

hides, dry and salt fish, bêche-de-mer, mother-of-pearl, and tortoiseshell; chief tn. is Macassar. Area, 72,679 sq. m.; pop. 3,438,000.

Celje. See CILLI.

Celle (*tsel'le*), formerly also ZELLE, tn., Hanover, Prussia, 23 m. by rail N.E. of Hanover; residence of Dukes of Brunswick-Lüneburg (1369-1705); ducal castle; library with precious mss.; prod. include printing ink, biscuits, umbrellas. Pop. 25,500.

Cenis (*sen-é'*), Mt., peak of Alps, between France and Italy; the pass is 6,700 ft. high, and over it a road was constructed by Napoleon. Near Mt. Cenis pass is tunnel over 7 m. long.

Central America. See under AMERICA; also BRITISH HONDURAS; COSTA RICA; GUATEMALA; HONDURAS; NICARAGUA; PANAMA; and SALVADOR.

Central Australia. See NORTHERN TERRITORY.

Central Falls, city, Rhode Isl., U.S.A., on Blackstone R., 6 m. N. of Providence; manufactures cotton. Pop. 26,000.

Central India, country occupied by Indian states grouped under political officer in charge of Central India Agency; divided into two parts by narrow strip of United Provinces; bounded N. by Rajputana, United Provinces, E. by Chota-Nagpur, S. by Central Provinces, W. by Bombay; comprises about seventy Indian states, of which Indore, Rewa, Bhopal, and Gwalior are most important treaty states; large part of surface rugged; drained by Ken, Narbada, Son, and other streams; chief mts., Vindhya, Kaimur Hills; greater part covered by very fertile soil; cotton, opium, food grains. Cap. Indore. Area, 51,531 sq. m.; pop. 6,000,000.

Central Provinces and Berar, prov., British India; bounded N. by Central India and Chota-Nagpur, E. by Bihar and Orissa, Madras, S. by Hyderabad, W. by Bombay. Surface generally is upland, with two tracts of plain; chief ranges, Satpura, Maikal, drained by

Narbada, Tapti, Mahanadi, Indravati, Wardha, and other streams; climate mainly hot; rainy season, June to Sept.; numerous irrigation works; Berar has ample rainfall; rice, cotton, millet, wheat, oil-seeds; minerals include coal, manganese; manufactures cottons. Great majority of inhabitants are Hindus; other religions, Mohammedanism, Christianity. Chief towns, Nagpur, Jubbulpore. Area, 131,052 sq. m.; pop. 13,912,700.

Centuripe (*chen-too-ré'pe*), or **CENTORBI**, *tn.*, Catania, E. Sicily; Greek and Roman antiquities; sulphur mines. Pop. 13,900.

Ce'os, **ZEa**, or **TZIA**, *isl.*, Cyclades, Ægean Sea; 15 m. long by 8 m. broad; centre culminates in Mt. Elias (1,864 ft.); lemons, citrons, olives, wine, and honey.

Cephalo'nia, one of Ionian Islands, w. Greece; area, 290 sq. m.; surface mountainous; highest peak, Elato or Monte Negro (5,315 ft.); cap. Argostoli; prod. currants, olive oil, wine, grain, pulse. Pop. 71,200.

Ceram', or **SERANG**, *isl.* of Dutch E. Indies, in Molucca group, forming part of residency of Amboina; little is known of interior, which is scantily populated; coast is inhabited by immigrant Malays; chief prod. sago. Area, 6,600 sq. m.; pop. c. 100,000.

Cerignola (*chú-ré-nyó'la*), *tn.*, *episc.* see, Italy, 22 m. S.E. of Foggia; rebuilt after earthquake in 1733; agricultural trade. Pop. 36,000.

Cerigo. See **CYThera**.

Cernauti (*cher-ne-oó'si'*), formerly **CZERNOWITZ**, cap. of Bukovina, Rumania, on R. Pruth; seat of Greek archbishop; active trade in agricultural produce. Pop. 115,000.

Cernavoda (*cher-na-vó'da*), *vil.*, Dobruja, Rumania, on E. bank of Danube where railway crosses marshy river region by the famous Carol Bridge (total length, including causeway, viaducts, approaches, etc., 12 m.), the only bridge between Belgrade and Black Sea; point of great strategic importance.

Cerro de Pasco (*ther'ó dá pas'cô*),

tn., cap., Junin, Peru; alt. 14,270 ft.; one of most famous mining centres of the country; silver, copper, coal, and lead; copper smelting in one of world's largest metallurgical plants. Connected with Lima by Oroya Rly. Pop. c. 15,000.

Cesena (*chá-sá'na*), *tn.*, *episc. see*, Forlì, Italy, 17 m. N.W. of Rimini; cathedral; Capuchin church with masterpiece of Guercino; fine palaces; sulphur, wine, hemp, and silk. Pop. (comm.) 54,000.

Cetatea Alba (*che-tat'ya al'ba*), formerly **AKKERMAN**, *tn.*, Rumania, on R. Dniester, c. 10 m. from Black Sea; trade in wine, salt, wool, and fruit. Pop. 33,600.

Cetinje (*tset-tén'ya*), cap., Montenegro, Yugoslavia; little more than a village; on narrow plateau (alt. 2,000 ft.) under shadow of Black Mountain; port Kotor. Pop. 5,500.

Cette (*set*), *tn.*, Hérault, France; most important seaport on Mediterranean after Marseilles; on broad, deep canal, which connects Canal du Midi with Rhone; wine trade; chemicals; oyster and anchovy fisheries; sea bathing; anc. *Setion*. Pop. 35,400.

Ceuta (*the-oó'tá*), fortified Spanish seaport at E. end of Moroccan peninsula, jutting out towards Gibraltar (14 m. distant); anc. *Abyla*, one of Pillars of Hercules; free port; now military and convict station; 15th cent. cathedral. Administered as part of prov. of Cadiz. Pop. c. 37,000.

Cévennes (*se-ven'*), *mt. range*, S.E. France, stretching N.E. to S.W. for 330 m., forming S. and E. fringe of the central plateau; forms watershed between basins of Loire and Rhone; separates two climates, two vegetations, and two national types; chief heights, Mézenc (5,753 ft.) and Lozère (5,584 ft.); minerals include coal, iron, zinc, manganese; mineral springs; large forests and extensive grazing-grounds.

Ceylon', *isl.* and Brit. crown colony at S. extremity of India; consists largely of undulating plains, but S. part is mountainous in interior; ex-

trems length, 272 m.; width, 137 m.; separated from India by Gulf of Mannar and Palk Strait, but closely connected by Adam's Bridge, over which it has been decided to carry railway. Highest mountains are Pedrotallagala (8,296 ft.) and Adam's Peak. Ceylon is drained by Mahaweli Ganga, which flows N.E., entering sea near Trincomali. Climate is tropical and healthy except on coast; chief prod. tea, copra, rubber, cocoa, cardamoms, cinnamon, tobacco. Chief towns are Colombo (cap.), Galle, Jaffna, Kandy, Nuwara Eliya. Area, 25,332 sq. m.; pop. 4,504,500.

Chablis (*shab-lî*), tn., Yonne, N. central France, 10 m. E. of Auxerre; renowned white wines. Pop. 1,900.

Chaco. (1) Terr., N. Argentine Republic, consisting of part of Gran Chaco lying S. of the Bermejo R. Only recently opened up to industry proper; cattle breeding is carried on; timber is exported and tannin is extracted from the quebracho trees which flourish in the forests; cap. Resistencia. Area, 52,741 sq. m.; pop. 46,300. (2) **Chaco, EL GRAN**. See GRAN CHACO.

Chad, large lake of Central Sudan, Africa; alt. 800 ft.; varies in extent according to season and is gradually drying up; depth of open water varies from 3 ft. in N.W. to over 20 in S.; receives Shari from S.E. and numerous other streams; shores are swampy and difficult of access; there are numerous islands.

Chad'derton, urb. dist., S.E. Lancashire, England, in parl. bor. of Oldham; cotton and chemical manufactures, engineering works and coal mines. Pop. 27,500.

Chaffarinas (*chaf-ar-â'nâs*), or ZAFARINAS, group of three Span. islets, N. of Morocco, Africa; fortified.

Chagos Archipelago, British group of coral islands, Indian Ocean, S. of Maldivé Islands; dependency of Mauritius; coconut oil manufactured.

Chalcis (*kâl'sis*), or EGRIPO, chief tn., isl. of Euboea, E. Greece, on Strait of Euripus; flourishing town and coloniz-

ing centre in anc. times; belonged successively to Athenians, Macedonians, Romans, and Turks; suffered from earthquake (1894). Pop. c. 16,000.

Chalfont St. Giles, vil., Buckinghamshire, England, 16 m. S.E. of Aylesbury; here Milton wrote parts of *Paradise Lost* and *Paradise Regained*. Pop. 2,100.

Chalfgrove, vil., Oxfordshire, England, 10 m. S.E. of Oxford; in a skirmish here (1643) Hampden was killed. Pop. 360.

Châlons-sur-Marne (*shâ-lon-soor-marn*), chief tn., dep. Marne, France, c. 100 m. E. of Paris and 25 m. S.S.E. of Reims, on r. bk. of the canalized Marne; narrow streets, fine boulevards, and park of 19 ac.; see of bishop; 13th to 17th cent. cathedral, with remarkable stained-glass windows; fine library, museum, school of arts and trades; principal industry is brewing, and there is great trade in champagne, grain, and hemp. Pop. 26,000.

Chalon-sur-Saône (*-sôn*), tn., Saône-et-Loire, France, on R. Saône, 64 m. N. of Lyons; tiles, iron goods, hats, gloves, glass; 14th cent. church. Pop. 28,400.

Chaman, tn., Baluchistan, on Afghan frontier; terminus of Indian North-Western Railway, through Quetta.

Chamba (*chum'ba*), Indian hill state, Punjab, India; chief rivers, Ravi and Chandra; rich in minerals, but little worked; agriculture, grazing; rice, maize, millet; cap. Chamba, 100 m. N.E. of Amritsar. Area, 3,216 sq. m.; pop. 141,900.

Chambal (*chum'bal*), riv., Central India, trib. of Jumna; rises in Vindhya Mts. Length, 650 m.

Chambersburg, bor., Pennsylvania, U.S.A., 46 m. S.W. of Harrisburg; machine shops, foundries, breweries; woollens. Pop. 13,200.

Chambéry (*shan-bâ-rê*), tn., cap., Savoie, S.E. France; archiepiscopal see; silk-gauze, lace, leather, hats. Pop. 19,500.

Chambon-Feugerolles, LE (*shan-bôn'foo-zhe-rôl'*), tn., Loire, France, 4 m. s.w. of St. Etienne; coal-mining centre; small-arms, railway material, screws and bolts. Pop. c. 12,000.

Chamonix (*sha-mo-né'*), mt. valley and vill., Haute-Savoie, France, at foot of Mt. Blanc; seven glaciers, including Mer de Glace; tourist resort. Pop. (vil.) 1,360.

Champagne (*shon-pân'ye*), old prov., France, now included chiefly in Marne, Ardennes, Haute-Marne, Aube. Surface largely consists of chalk downs; in N. and E. are vineyards producing champagne wines.

Champaign (*sham-pân'*), city, Illinois, U.S.A., 125 m. s.w. of Chicago; railway workshops, foundries; industrial univ. Pop. 20,000.

Champar'an, dist., Bihar and Orissa, India, in N.W. corner of Orissa; mainly agricultural; saltpetre refineries; malarious endemic diseases prevail. Area, 3,531 sq. m.; pop. 1,940,800.

Champlain (*sham-plân'*), a lake between states of New York and Vermont, U.S.A.; area, c. 600 sq. m.; numerous affluents; contains about fifty islands; navigable for largest vessels; drains N. by Richelieu R. into St. Lawrence; communicates with Hudson R. by Champlain Canal; through traffic mainly in lumber and coal.

Chan'da, dist., Nagpur div., Central Provinces, India; grains, cotton, silk; live-stock; timber; coal and iron. Chief tn., Chanda, 80 m. S. of Nagpur. Area, 9,312 sq. m.; pop. (tn.) 23,000.

Chan'dauli, tn., United Provinces, India, 27 m. S. of Moradabad; cotton, sugar, hemp; important railway junction. Pop. c. 27,000.

Chandernagore (*chund-er-nug'-er*), or CHANDARNAGAR, tn., on Hugli, Bengal, India; Fr. possession and settlement; manufactures cotton cloth; formerly rival of Calcutta, but now of no commercial importance. Pop. (settlement) 25,800.

Chang-chow, walled city, prov. Fukien, China, 20 m. W. of Amoy;

centre of silk trade. Pop. (est.) 1,000,000.

Chang-chun, commercially KWANCHENGTE, tn., Kirin, Manchuria, 170 m. N.E. of Mouliden; Japan controls (since 1905) railway from here to Port Arthur. Pop. c. 60,000.

Chang-sha, cap., Hunan, S. China; trades in antimony, tea, rice, coal. Pop. c. 535,000.

Channel Islands, or ILES NORMANDES, Brit. islands in Eng. Channel, off coast of Normandy; largest are Jersey, Guernsey, Alderney, Sark, Herm; produce large quantities of fruit, flowers, and vegetables, exported to England; important cod, lobster, and oyster fisheries; famous for cattle, each island having its particular strain; climate mild and sunny. The islands are favourite summer resort; they are surrounded by reefs on which many shipwrecks have taken place. Jersey and Guernsey (the latter including Alderney and Sark) are each administered according to their own laws, and have local copper coinage. Taxes and customs duties are very low. People are of Norman stock. Official language is French, but English is used for business and is taught in schools. Each island has its own local dialect. Area, 75 sq. m.; pop. 93,100.

Chantabun', cap. of div. of same name, Siam, on E. of Gulf of Siam; trades in pepper, cardamoms, rubies, sapphires. Pop. c. 5,000.

Chantá'da, tn., Lugo, N.W. Spain, 44 m. E. of Pontevedra; grain, fibres, dairy produce; tiles. Pop. 13,500.

Chantilly (*shon-té-yé*), tn., Oise, France, 25 m. N. of Paris; many historic associations; formerly celebrated for manufacture of lace; its château is a magnificent specimen of Renaissance architecture and contains a valuable library and collection of pictures. Chantilly is a horse-racing centre, and the Prix du Jockey Club (the Fr. Derby) is run in May. Pop. 5,100.

Chao-chow, city, Kwangtung, China, 25 m. N. of Swatow; exports

sugar, oranges, and vegetables; railway to Swatow.

Chap'el End, vil., N.E. Warwickshire, England, 2 m. N.W. of Nuneaton; collieries. Pop. 2,000.

Chapel-en-le-Frith, mkt. tn., Derbyshire, England, 5 m. N. of Buxton; paper-making and waddingmills; also bleach-works. Pop. 5,300.

Chap'ra, or **CHUPRA**, chief tn., Saran dist., Bihar and Orissa, India, near junction of Gogra and Ganges, 32 m. N.W. of Patna; indigo; has declined in importance, but is still a busy industrial town. Pop. c. 47,000.

Chard, mkt. tn., Somersetshire, England, 13 m. S.E. of Taunton; lace and woollen goods. Pop. 4,700.

Charente (*sha-ron'*). (1) Riv., France; enters Bay of Biscay below Rochefort; navigable as far as Angoulême. (2) Inland dep., France; traversed by riv. Charente; surface undulating, wooded hills, sandy plains; limestone and granite quarries; exports potatoes, cognac, and stone; chief town, Angoulême. Area, 2,305 sq. m.; pop. 312,800.

Charente-Inférieure, dep., w. coast, France, includes the islands of Ré and Oléron; well cultivated; good pastures; exports brandy and salt; oyster and pilchard fisheries; chief tn., La Rochelle. Area, 2,791 sq. m.; pop. 417,800.

Charenton-le-Pont (*sha-ron-ton'-le-pont*), suburb of Paris, France; manufactures porcelain, artificial flowers. Charenton, on account of its lunatic asylum, is French equivalent of Eng. 'Bedlam.' Pop. 20,300.

Charkhar'i, Indian state and tn., Bundelkhand, N. Central India; town exports grain, cotton, linseed. Pop. (state) 123,400; (tn.) 9,600.

Charleroi. (1) (*shar'-le-roi*) Tn., Hainaut, Belgium, on Sambre; collieries, iron foundries; glass, hardware. Pop. 27,400. (2) (*shar'-le-roi*) Bor., Pennsylvania, U.S.A., 22 m. S.S.E. of Pittsburgh; prod. steel and glass. Pop. 11,500.

Charleston. (1) Seapt., S. Carolina, U.S.A., situated on point of land

between Cooper and Ashley rivers, which, uniting, form fine harbour; naval station, military and musical academies, and a medical coll. Seat of Catholic bishop; important commercial centre; manufactures include fertilizers, clothing; exports cotton, rice, lumber, phosphates. Pop. 62,000. (2) Cap., W. Virginia, U.S.A.; important industrial centre producing coal, salt; hardware, lumber. Pop. 60,000.

Charleville', tn., Ardennes, France, on R. Meuse, opposite Mézières; manufactures iron goods and bricks. Pop. 21,700.

Charlotte', city, N. Carolina, U.S.A., 130 m. S.W. of Raleigh; rly. jn.; seat of univ. for Negroes; manufactures cotton and machinery. Pop. 83,000.

Charlotte' Amal'ie, now St. THOMAS, port, St. Thomas, U.S. Virgin Islands, W. Indies. Pop. 6,400.

Charlot'tenburg, tn., Prussia; since 1920 part of Berlin; has royal palace; famous technical coll.; manufactures china, beer, machinery.

Char'lottesville, city, Virginia, U.S.A., 67 m. N.W. of Richmond; seat of Univ. of Virginia, founded by Thomas Jefferson; manufactures iron, lumber, flour, cigars, textiles. Pop. 10,700.

Char'lottetown, cap., Prince Edward I., Canada; fine harbour; has woollen factory, iron foundry, shipyards, and extensive and important fisheries. Pop. 10,800.

Charlton Kings, urb. dist., Glos., England, suburb of Cheltenham. Pop. 4,800.

Charn'wood Forest, rocky, undulating region, largely treeless, N. Leicestershire, rising to elevation of 912 ft.; granite quarries.

Char'ters Towers, tn., Queensland, Australia, 65 m. S.W. of its port Townsville; gold mines. Pop. 9,350.

Chartres (*shar'tr*), tn., Eure-et-Loir, France, 55 m. S.W. of Paris; seat of bishop; cathedral of Notre Dame is one of the most magnificent in France; corn market; industries include flour

milling, brewing, distilling, and tanning. Pop. 20,700.

Châteaudun (*shā-tō-dun'*), tn., Eure-et-Loir, France, 28 m. s. of Chartres; has mediæval castle; manufactures flour, leather, jewellery, and machinery. Pop. 5,800.

Châteauroux (*shā-tō-roo'*), chief tn., Indre, France, on R. Indre, 60 m. s.e. of Tours; prod. textiles, machinery, and tobacco; famous castle. Pop. 22,200.

Château-Thierry (*shā-tō-tē-ā-rē'*), tn., Aisne, France, 59 m. E.N.E. of Paris, on rising ground on r. bk. of Marne; statue of La Fontaine, a native; manufactures musical and mathematical instruments. Pop. 7,200.

Châtelet (*shāt-lā'*), tn., Hainaut, Belgium; 4 m. E. of Charleroi; coal mines, hardware factories, pottery. Pop. c. 13,000.

Châtellerault (*shā-tel-e-rō'*), tn., Vienne, France, 40 m. s. of Tours; cutlery, small-arms. Pop. 13,200.

Chat'ham. (1) Port and munic. and parl. bor., on Medway, Kent, England, adjoining Rochester, Brompton, and Gillingham; has important fortifications, and immense dockyards covering over 500 ac. and extending over 3 m. Important buildings are the arsenal, military and naval barracks, and hospitals; chief industries are shipbuilding, timber cutting, and brick making. Pop. 43,000. (2) Tn., port, New Brunswick, Canada, on Miramichi R.; lumber trade and fisheries; foundries. Pop. 4,500. (3) City, port, Ontario, Canada, on R. Thames, 10 m. from L. Erie; iron goods, machinery; large export trade in agricultural produce. Pop. 13,200.

Chat'ham Islands, Brit. group in S. Pacific Ocean, E. of New Zealand; consist of three islands (Chatham, the largest, 38 m. long) and several rocky islets; dependency of New Zealand; total area, 375 sq. m.; coasts rocky; surface hilly, undulating, fertile; stock rearing and export of wool. Pop. 560 (290 Maoris).

Chattanooga, tn., Tennessee, U.S.A., on Tennessee R.; important railway

centre and manufacturing town; has cotton mills, foundries, steel works, blast furnaces; manufactures include carriages, furniture, bricks, tiles, chemicals, and there is an extensive trade in lumber, grain, and coal. Scene of much fighting in American Civil War. Pop. 120,000.

Chat'teris, mkt. tn., Cambridgeshire, England, 10 m. s.w. of Ely; breweries, engineering and rope-making works; corn and roots. Pop. 5,200.

Chaumont (*shō-mon'*), chief tn., Haute-Marne, France, on R. Marne; chief industries, glove making, leather dressing. Pop. 12,900.

Chauxy (*shō-nē'*), tn., Aisne, France, on r. bk. of the Oise; stands on main rly. line from Paris to Brussels; chemical and glass works. Pop. 9,000.

Chautauqua (*shaw-tauk'wa*), vill., summer resort, on Lake Chautauqua, w. New York, U.S.A.; centre of a great religious, educational, and social movement. Institution grounds cover 165 ac. Pop. 4,000.

Chaux-de-Fonds (*shō-de-fōn'*), LA, tn., Switzerland, 9 m. n.w. of Neuchâtel; centre of watch-making industry. Pop. 37,700.

Chaves, tn., N. Portugal, near Spanish frontier; famous for hot saline springs; anc. *Aquæ Flavia*; silk, linen. Pop. 6,800.

Chedd'le. (1) Tn., Cheshire, England, 3 m. s.w. of Stockport; printing and bleaching works. Pop. (with Gatley) 18,500. (2) Mkt. tn., Staffordshire, England, 13 m. N.E. of Stafford; coal mines; silk mills. Pop. 6,200.

Cheam. See SUTTON AND CHEAM.

Cheb (*keb*), formerly EGER, tn., Czechoslovakia, in extreme n.w. of Bohemia; contains ruined citadel; industries include brewing, textiles, and machinery. Pop. 27,500.

Ched'dar, vill., Somersetshire, England, 15 m. s.w. of Bristol; famed for its cliffs and caves; cheese. Pop. 2,000.

Cheduba, or MAN-AUNG, isl., coast of Arakan, Lower Burma; petroleum

wells; rice and tobacco form the chief crops. Area, 220 sq. m.; pop. c. 30,000.

Chefoo, known to Chinese as YEN-TAI, port, Shantung, China, at entrance to Gulf of Pohai; exports silk, ground-nuts, soya beans, fruit. Pop. c. 93,000.

Chekiang, maritime prov., China; hilly, fertile; silk, tea, and cotton are the chief exports; principal cities, Hangchow and Ning-po. Area, 36,670 sq. m.; pop. 22,000,000.

Chelmno (*kel'm'nö*), tn., Poland, on R. Vistula; oil mills; trade in agricultural produce. Pop. 11,000.

Chelmsford, co. tn., Essex, England; has grammar school, founded by Edward VI.; industries, electrical engineering, manufacture of motor-cars; trade in agricultural produce; its corn and cattle markets are among largest in county. Pop. 26,500.

Chel'sea. (1) Bor., London, England; on riv. Thames, communicating with Battersea by three bridges; residence of numerous celebrities, including Sir Thomas More, Katherine Parr, Walpole, Swift, Leigh Hunt, Carlyle, Turner, Rossetti, Whistler; formerly famous for porcelain; most notable building is Chelsea Royal Hospital, for invalid soldiers, designed by Wren. Pop. 59,000. (2) City, Massachusetts, U.S.A., suburb of Boston; iron, textile, and rubber goods. Pop. 45,000.

Chel'tenham, inland wat.-pl. and mkt. tn., on Chelt, Gloucestershire, England; mineral springs discovered (1776); has medicinal baths, winter gardens, parks, public school, and other educational institutions. Pop. 49,400.

Chelyabinsk, town, Ural Area, Russia; corn trade; tanneries and distilleries; junction of rly. line from Leningrad via Perm and from Moscow via Samara; hence the gate of Siberia; centre of trade for Ural mining towns. Pop. 59,200.

Chem'nitz, tn., Saxony, Germany; one of the leading industrial commercial centres; has important loco-

otive and engineering works; manufactures fine cottons and woollens. Pop. 331,600.

Chemul'po, seapt., Korea; treaty port, opened 1883; exports soya beans, rice, hides; the Russo-Jap. War began here (1904). Pop. 53,700.

Chenab, one of the 'five rivers,' Punjab, India; rises in Kashmir Mts., and with Jhelum, Ravi, and Sutlej joins Indus at Mithankot. Chenab Canal, largest and most profitable perennial canal in India, led to settlement of colony in formerly arid Rechna Doab, between Ravi and Chenab rivers.

Cheng-tu, cap. of Szechwan, China; in centre of rich plain; silk, rice, fruit. Pop. (est.) 500,000.

Chipping Wycombe. See WYCOMBE.

Chep'stow, riv. port and mkt. tn., Monmouthshire, England, on r. bk. of Wye; ruins of 11th cent. castle; iron foundry, salmon fisheries; spring tides rise to height of 48 ft. Pop. 4,300.

Chequers (*chek'ers*), seat, Bucks, England, $\frac{3}{4}$ m. s.w. of Wendover. Gifted (1921) by Lord and Lady Lee of Fareham as official country residence of Prime Minister.

Cher (*shär*). (1) Riv., France, trib. of R. Loire; 200 m.; navigable for boats from Vierzon. (2) Dep., central France; generally flat, with low wooded hills; wheat, oats, wine; iron mines; porcelain. Chief tn., Bourges. Area, 2,819 sq. m.; pop. 298,400.

Cherbourg (*sher-boor*), seaport, Manche, France, on N. coast of Cotentin peninsula; magnificent break-water over two miles in length; has extensive docks and arsenal; chief importance is derived from its naval and commercial harbours; chief industries, shipbuilding, rope making, sugar refining, fishing and sawmilling; chief exports, stone; dairy and poultry produce. Pop. 43,700.

Cheribon. (1) Prov., N. Java, Dutch E. Indies, producing sugar, coffee, rice, tea. Area, 2,620 sq. m.; pop. 1,006,000. (2) Seapt. tn., in

above; exports sugar and coffee. Pop. 33,000.

Cheriton, urb. dist., Kent, England, on coast 2 m. w. of Folkestone; wat.-pl. Pop. 8,100.

Cherkassy, tn., Ukraine, U.S.S.R., on Dnieper; sugar, tobacco; busy river port. Pop. 38,500.

Chernigov, (1) Co., s. Ukraine, U.S.S.R.; plain, watered by Rs. Dnieper and Desna; climate is severe and soil is unfavourable to agriculture; main products are lumber, tan, leather goods. Area, 4,274 sq. m. (2) Cap. of above; leather goods and flour milling; two cathedrals. Pop. 34,300.

Cherrapunji (*cher'ra-poon'jē*), vil., Khasi Hills, Assam, India, 25 m. s. of Shillong; mean annual rainfall about 500 in., the heaviest known in the world. In 1861, 905 in. fell (366 in. in July).

Cherso (*ker'so*). (1) Isl., Gulf of Quernero, Adriatic Sea; belongs to Italy; long, narrow, mountainous; wine, fruits; sheep. Area, 150 sq. m.; pop. c. 8,000. (2) Seapt. and chief tn. of above; fishing, boat building. Pop. c. 4,000.

Chertsey, urb. dist., Surrey, England, 23 m. s.w. of London; agricultural produce. Pop. 17,100.

Chesapeake, bay, Atlantic coast, U.S.A.; receives rivers Susquehanna, Potomac, James, etc.; famous for oysters and wild fowl.

Chesham (*ches'am*), urb. dist., Bucks, England, on R. Chess, 5 m. s.w. of Berkhamstead; boots and brushes; wooden wares; brickfields. Pop. 8,800.

Cheshire, co., n.w. England. Bounded by Lancs, Yorks, Derby, Staffs, Salop, Denbigh, and Flint. Greater part of surface is undulating plain, with fine woods and number of small lakes; watered by Mersey, Dee, and other rivers; soil generally fertile; market gardening and dairying carried on, cheese largely produced; manufactures textiles and chemicals; shipbuilding, fisheries. Minerals include salt, coal. Canal systems of

great importance include Manchester Ship Canal, Shropshire Union, and the Grand Trunk or Trent and Mersey. The county is well served with railways. Chief towns are Chester (cap.), Birkenhead, Macclesfield, Stockport, Crewe. Area, 1,028 sq. m.; pop. 1,087,500.

Cheshunt (*ches'unt*), urb. dist., on Lea, Hertfordshire, England, 16 m. n. of London by rail; nursery and market gardening. Pop. 14,700.

Chesil Bank, remarkable ridge of sand and pebbles on coast of Dorsetshire, connecting Isle of Portland with mainland.

Ches'ter, (1) City, cap. of Cheshire, England, on R. Dee; canal port, great railway centre; surrounded by anc. walls; old Gothic cathedral (11th cent.); many old timbered houses; Gothic town hall; several public parks; racecourse ('Roodee'). Ironworks and breweries; manufactures of cheese, leather, gloves, boots, shoes. Pop. 41,000. (2) City Pennsylvania, U.S.A., on the Delaware; military coll.; shipyard, lumber, and textiles. Pop. 41,400.

Ches'terfield, mkt. tn. and munic. bor., Derbyshire, England; Gothic church of All Saints and St. Mary contains anc. monuments, and has remarkable twisted spire, 230 ft. high; industries include making of fishing tackle, hosiery, cotton, machinery. Pop. 64,100.

Ches'ter-le-Street, tn., Durham, England, 6 m. n. of Durham; collieries, ironworks. Pop. 16,600.

Ches'terton, vil., on n. bank of the Cam, forming n.e. suburb of Cambridge, England; boat building and tile manufacture. Pop. 11,600.

Ches'tot Hills, range of rounded grassy hills forming border between England and Scotland; extending 35 m. n.e. to s.w.; highest point, 2,676 ft.; numerous ruins and border 'peels'; famed for valuable breed of sheep.

Cheyenne (*shi-en'*), cap. of Wyoming, U.S.A.; important railway terminus; centre of cattle industry of n.w.; railway works. Pop. 13,200.

Chhattisgarh (*chut-is-gār*), eastern div., Central Provinces, India; comprises the districts of Raipur, Bilaspur, and Drug. Area, 22,050 sq. m.; pop. 3,382,000.

Chhindwāra. (1) Dist. in Narbada div. of Central Provinces, India. Area, 4,630 sq. m.; pop. c. 491,000. (2) Tn. of above dist., 65 m. N. of Nagpur; market town with local industries in pottery and cotton hand-weaving. Pop. 13,400.

Chianti (*kē-an'īē*), mountain group of the Apennines, Upper Tuscany, Italy; vineyards supply well-known red wine of the same name.

Chiapas (*kē-d'pas*), Pacific state, Mexico; mountainous; immense forests; chief products, dye and cabinet woods, cattle, hides, coffee, and rubber. Cap. Tuxtla-Gutierrez. Area, 27,222 sq. m.; pop. 456,400.

Chiavari (*kē-d'vā-rē*), tn., Liguria, Italy, 24 m. E.S.E. of Genoa; manufactures chairs, lace, and silk. Pop. 12,500.

Chicago (*shī-kaw'gō*), city, Illinois, U.S.A.; at S.W. end of Lake Michigan, on small river Chicago; second largest city in U.S.A.; regularly laid out, with wide streets crossing each other at right angles; many fine parks, which almost surround city; some fine public buildings, including town hall, art institute, museum, library, auditorium, R.C. and Prot. cathedrals. One of busiest commercial centres in world, increasing in wealth and population. Natural advantages of situation, railway and waterway facilities, and enterprise and keen commercial spirit of its merchants, have made it what it is. Trade in grain, flour, and pork is enormous, surpassing anything else of kind in world; there are factories and workshops connected with hog and beef packing, soap, rolling mills, foundries, machinery, wagons, agricultural implements, cars, bridges, tanneries, boot making, electric supplies, jewellery, furniture, pianos, breweries, tobacco, clothing, furs, printing, bakeries, coffee

and spice mills, all turning out products of large value. Rapid development was chiefly due to construction of Illinois and Michigan Canal and development of lake trade; in 1837 the town had about 4,000 inhabitants; pop. (1930) 3,375,000.

Chich'ester, city and munic. bor., Sussex, England, between S. Downs and an inlet of the Eng. Channel; has old octagonal market cross and remains of ancient walls; Holy Trinity Cathedral (dating from 11th cent.) has a detached belfry and contains interesting relics. No outstanding industries, but wooden ware, coal, timber, corn, flour, and malt are produced. Pop. 13,900.

Chick'asha, tn., Oklahoma, U.S.A., 40 m. S.W. of Oklahoma; trade centre for corn, cotton, live-stock. Pop. 14,000.

Chiclá'na, tn., Spain, 10 m. S.E. of Cadiz; mineral springs; centre of fruit and vine-growing district. Pop. 12,000.

Chic'opee, town, Massachusetts, U.S.A., at confluence of Chicopee and Connecticut rivs., 4 m. N. of Springfield; manufactures cotton, hardware, firearms, carpets, and automobiles. Pop. 44,000.

Chicoutimi (*shē-koo-tē-mē*), chief tn., Chicoutimi co., Quebec, Canada, c. 230 m. N. of Quebec city; centre for lumber, pulp, and paper industries; great hydro-electric station. Pop. 8,900.

Chidam'baram, tn., Madras, India, 40 m. S. of Pondicherry; famous for great Hindu temple; visited by large numbers of pilgrims. Pop. 22,500.

Chiang-mai (*shē-eng-mī*), trading tn., N. Siam; terminus of rly. from Bangkok; founded 11th cent.; walls and fortifications now in ruins; centre of teak trade. Pop. c. 30,000.

Chieri (*kē-d'rē*), tn., episc. see, Piedmont, Italy, 8 m. S.E. of Turin; Gothic cathedral; manufactures silks and cottons. Pop. 13,600.

Chieti (*kē-d'īē*). (1) Prov., Abruzzi, central Italy; barren mountainous region with low, fertile coast belt;

prod. include wheat, olives, wine, flax, tobacco, textiles, hats, leather goods; fishing, preparation of salt. Area, 1,001 sq. m.; pop. 333,600. (2) Cap. of above; archiepiscopal see; manufactures woollens, hats, soap. Pop. 17,900.

Chignecto (*shig-nek'tō*), bay, forming N.E. branch of Bay of Fundy, between Nova Scotia and New Brunswick, Canada.

Chigwell, par. and vil., Essex, England, 13 m. N.E. of London; in 'King's Head Inn' is room where Dickens wrote part of *Barnaby Rudge*. Pop. (par.) 2,900.

Chihli. (1) Prov., China. See HOPEH. (2) GULF OF. See POHAI.

Chihuahua (*chē-wā-wa*). (1) State, N. Mexico; hot, dry climate; in E., large tracts devoid of vegetation; traversed in W. by Sierra Madre, which form fruitful valleys of good pasture; primarily cattle country—great meat-raising dist. of Mexico; rich in minerals, gold and silver mining being principal industry. Area, 90,036 sq. m.; pop. 401,600. (2) City, cap. of above; mining; manufactures cotton and woollen goods. Pop. 37,100.

Chilas (*chē-las*), vil. and fort on R. Indus, Kashmir, India; strategic importance; commands direct route to Gilgit from Punjab.

Chile, or **CHILI** (*chi-lē*), republic, S. America, lying along W. coast between main chain of Andes and Pacific; greatest length, 2,661 m.; breadth varies from 60 to 273 m.; bounded N. by Peru, E. by Bolivia and Argentina. Surface generally falls from E. to W., and also from N. to S., Andes being higher in N. than in S.; average height of Andes about 9,000 ft.—highest peak, Aconcagua (22,868 ft.). Many of these mountains are dormant or subdormant volcanoes. From E. to W. there are the Andes, a central valley tableland, the Coast Cordillera, and a coastal strip; the Andes slope down as they pass southward and finally dip under sea so that the Coast Cordillera to the W. takes the form of a chain of islands

parallel to southern third of coast and curving S. round Tierra del Fuego. Juan Fernandez I., W. of Valparaiso, belongs to Chile. Owing to wide range of latitude climate is very varied; desert of Atacama in N. is practically rainless; but further S., in the region of the westerly winds, rainfall gradually increases and is adequate. Temperature is low, considering latitude, owing to influence of Humboldt Current; chief rivers are Maipo, Biobio, Loa, Copiapo, and Valdivia, providing a large amount of potential water-power. Soil of valleys in central provinces is very fertile; over half population engaged in agriculture, producing wheat and other cereals, rearingsheep and cattle, growing vines, oranges, figs, olives, and other fruits, and producing silk. In S. and islands are dense forests; in N. are enormous deposits of nitrates, which are great source of wealth. Other minerals of importance include copper, silver, manganese, gold, cobalt, iron, coal. Industries include copper smelting, sugar refining, tanning, manufacture of soap, candles, chemicals, boots, shoes, textiles. Chief exports are copper, nitrates, iodine, guano, wool, borax, and meat. Transandine Rly. brings Santiago within 36 hours of Buenos Aires. Chile is well provided with telegraphic communications. Chief towns are Santiago and Valparaiso. Area, 290,084 sq. m.; pop. 3,753,800.

Chil'koot (or **CHILCOOT**) Pass, a difficult pass over Coast Range of Rocky Mts., N. America, between Alaska and Yukon; highest point, 3,502 ft.; for some time one of the principal routes to the Yukon goldfields; open during most of year.

Chillán (*chē-yán*), tn., Chile, 55 m. N.E. of Concepcion; trade in cattle, grain, hand-made lace; hot sulphur springs. Pop. 30,900.

Chillicothe (*chil-i-koth'ē*). (1) City, Ohio, U.S.A., 45 m. S. of Columbus; rly. workshops, furniture, paper, leather. Pop. 15,800. (2) City,

Missouri, U.S.A., 70 m. N.E. of Kansas; coal, timber, and live-stock. Pop. 6,800.

Chilos (*chê-lô-î*), southern prov., Chile, including large island of same name off coast, and about sixty smaller islands; cap. Puerto Montt. Area, c. 37,000 sq. m.; pop. c. 247,500.

Chil'tern Hills, low range of chalk downs crossing Buckinghamshire and Oxfordshire, England; highest peak, Wendover Hill, 905 ft.

Chil'vers Coton, suburb of Nuneaton, Warwickshire, England; coal mines; brick and tile works. Pop. 12,770.

Chimborazo (*chim-bô-râ-zô*). (1) Prov., Ecuador, S. America; sulphur. Area, 2,989 sq. m.; pop. 125,000.

(2) Extinct craterless volcano in the Andes, Ecuador; alt. 20,498 ft.; snow-capped; several glaciers; first ascended by Wymper (1879-80).

Chim'kent, tn., Sir Darya prov., Kazak Rep., U.S.S.R., 70 m. N.E. of Tashkent; health resort; manufactures cotton, tobacco, flour. Pop. 21,700.

China, republic, eastern Asia; bounded N. by Siberia; E. by Korea, Yellow Sea, China Sea; S. by Fr. Indo-China, India; W. by Afghanistan and Turkestan; includes China Proper (with Manchuria), Mongolia, Tibet, and Sinkiang. Greater China is traversed by two folded mountain systems which stretch from Pamir plateau. To N.E. the Tien-Shan extend to the Khyngan Mts. of Manchuria; S. of Taklamakan and Gobi Deserts the Kunlun Mts. continue into Honan as the Chin-ling-shan and Fu-niu-shan, while in W. Kansu the branch is the Nan-shan. Mts. of Shantung, forming a peninsula between the Gulf of Pohai and the Yellow Sea, are an isolated system. There are numerous other ranges. In products and climate the Kunlun Mts. divide N. from S. China. In the E. there is a great alluvial plain which covers over 200,000 sq. m. and supports an enormous population. Principal rivers are Yangtze Kiang, Hwang-Ho, and Si-

kiang. There are numerous canals, including the Grand Canal, which crosses plain from Hangchow to Tientsin (850 m.). There are many lakes, chief of which are Tungting, Po-yang, and Tai-hu. As a defence against northern tribes the Great Wall, length c. 1,500 m., was completed in 214 B.C. The climate varies greatly from S. to N., and from coast to interior; it is generally monsoon in type with rain between April and Sept. Temperature in N. ranges from 23° to 80° F. at Peking, in S. from 60° to 85° F.; excessive dryness characterizes interior. Many parts of the country are extremely fertile, particularly the loess region of the N., the red basin of Szechwan, and the river valleys. Extensive forests are rare, but bamboo is of prime importance, while the camphor tree, maple, ebony, etc., are found, as is also the mulberry (for silkworms). Fish ranks with rice as staple food. China is very rich in minerals, possessing enormous coalfields which could make it one of the first coal-producing countries in the world; iron, copper, antimony, tin, zinc are also worked. Chinese are, however, primarily an agricultural people. Chief crops are rice, wheat, barley, millet, buckwheat, maize, soya bean in the N., and rice, cotton, indigo, sugar in S. Area under opium poppy is decreasing. Pigs are reared everywhere. China produces much silk, but Chinese manufactures of silks and embroideries, porcelains, paper, lacquer ware, cotton, etc., are still largely carried on by manual labour; modern sugar refineries have been set up at Hong Kong, Swatow, and Amoy; iron and steel works at Han-yang, and many flour, rice, and oil mills. About fifty treaty ports and twenty-five other places are open to international trade. Chief exports are silk and manufactures, beans and bean cakes, tea, cotton, skins, and hides, sesamum seeds, tin, etc.

Most populous provs. are Szechwan and Kwangtung. Over sixty races or

tribes are represented in republic and dependencies, comprising Chinese, Manchus, Mongols, Tibetans, etc. Present cap. Nanking; former cap. Peking (until 1928). Area (est.) 4,279,170 sq. m.; pop. (est.) 440,000,000.

Chinan. See **TSINAN**.

Chinandega, tn., w. Nicaragua, Central America; bananas, sugarcane, and cotton are cultivated; mining is carried on. Pop. 14,400.

China Sea, part of Pacific Ocean, stretching from Korea to Malay Peninsula; two sections linked by Straits of Formosa—N. China Sea, including Eastern and Yellow Seas, and S. China Sea, from Formosa to Singapore. The sea is subject to typhoons in summer; it is rich in fish.

Chinde (*zhèn'dā*), seapt., Portuguese E. Africa, at mouth of Chinde R.; only navigable mouth of Zambezi; chief port for Zambezi valley, and also serving Nyasaland.

Chindwin. (1) Two districts (Upper and Lower), Sagaing div., Upper Burma; mountainous; valuable teak forests; extensive coalfields; rice cultivated. Areas, 16,037 and 3,480 sq. m.; pops. 186,900 and 342,900. (2) Riv., flowing through above; principal trib. of Irrawaddy; navigable over 400 m. during certain seasons of the year for steamers.

Ching'ford, urban dist., Essex, England, near Epping Forest; tourist resort. Pop. 22,100.

Ching'legut. (1) Dist., surrounding city of Madras, India; generally flat; soil poor; badly watered; suffered from famine; cotton and silk weaving. Area, 2,824 sq. m.; pop. 1,500,000. (2) Tn. in above, 30 m. s. of Madras; manufactures pottery. Pop. 11,800.

Chinkiang, city and treaty port, Kiang-su, China; on Yangtze, 160 m. above Shanghai; important commercial centre; chiefly acts as distributor of imported goods; trade is suffering through gradual silting up of harbour. Pop. c. 115,000.

Chinon (*shē-non'*), tn., Indre-et-

Loire, France, 26 m. s.w. of Tours; trade in basket and rope manufactures; famous castle where Joan of Arc had first interview with Charles VII. Pop. 4,170.

Chinwangtao, treaty port, Hopeh, China; recently constructed harbour; exports coal; only ice-free port on w. shore of Gulf of Pohai. Pop. c. 5,000.

Chioggia (*kē-of'e-a*), seapt., episc. see, Venezia, Italy; has ancient corn market (1322); fishing and coasting trade. Pop. 36,100.

Chios, **KIOS**, or **SCIO** (*k'ios* or *kē'os*), Greek isl., Aegean Sea, off w. coast, Asia Minor; mountainous; subject to earthquakes; fine climate; fertile and well cultivated; antimony mines and marble quarries. Wine, figs, and gum mastic are chief exports. Chief tn., Chios, is by tradition birthplace of Homer. Area, c. 300 sq. m.; pop. (isl.) 75,700.

Chip'penham, mkt. tn., munic. bor., Wiltshire, England, 20 m. E. of Bristol; chief industries are ironfounding, boot making, bacon curing. Pop. 8,500.

Chip'pewa Falls, city, Wisconsin, U.S.A., 83 m. E. of St. Paul; lumber; flour and woollen mills; breweries. Pop. 9,000.

Chipping Nor'ton, munic. bor., Oxfordshire, England, 16 m. N.W. of Oxford; woollens, horsecloths, gloves. Pop. 3,500.

Chirk, par. and vil., Denbighshire, Wales, 9 m. s. of Wrexham; coal mines; paper. Pop. (par.) 3,000.

Chisinau (*kish-in-ow'*), formerly KISHINEV, tn., Bessarabia, N.E. Romania; centre of trade in grain, wine, tobacco, tallow, wool and hides; manufactures include brandy, leather, soap. Pop. 190,000.

Chislehurst, urban dist., Kent, England, 11 m. S.E. of London; mansion, Camden Place, was residence of Napoleon III., who died here (1873), and of Empress Eugénie (1871-80); residential dist. Pop. 9,900.

Chiswick. See **BRENTFORD AND CHISWICK**.

Chita (*chē'ta*), tn., Far Eastern Area, U.S.S.R.; at head of navigation of Amur system; important entrepôt of trade; administrative and commercial centre; exports furs, cattle, hides, tallow. Pop. 57,700.

Chitaldroog. (1) Dist., N. Mysore, India; poor soil; scanty rainfall; subject to periodic droughts and famine; cotton, rice. Area, 4,022 sq. m.; pop. 574,200. (2) Tn., administrative centre of above; cotton cloth. Pop. 8,500.

Chitral, small Indian state, s. of Hindu Kush Mts., N.W. Frontier Prov., Brit. India, occupies fertile valley of Chitral R.; cap. Chitral; is of great strategical importance, as it commands principal passes over the Hindu Kush. Area, c. 4,500 sq. m.; pop. c. 35,000.

Chittagong. (1) Maritime dist., Bengal, India, extending from Bay of Bengal to Lushai Hills. Area, 2,497 sq. m.; pop. 1,611,000. (2) Chief tn. of above; important trading centre; terminus of Assam-Bengal railway and chief port for Assam; exports jute, rice, tea, hides; mineral oil. Pop. 36,000.

Chittoor, tn., Madras, India, 80 m. w. of Madras; chief tn. of dist. of same name; Hyder Ali died here (1782). Pop. 17,900.

Chiusi (*kē-ōō'sē*), tn., episc. see, Tuscany, Italy, 37 m. s.e. of Siena; collection of Etruscan antiquities; 12th cent. cathedral. Pop. (comm.) 6,740.

Chivasso (*kē-us'sō*), tn., episc. see, Italy, 12 m. n.e. of Turin; trade in cattle, corn, and silk; important fortress in Middle Ages. Pop. (comm.) 10,900.

Chobe (*chō'bā*), riv., S. Africa; rises in Angola; large r. bk. tributary of Zambezi; basin is forested and very fertile. Length, c. 600 m.; discovered by Livingstone (1851).

Choisy-le-Roi (*shwa-zē-le-roi*), tn., Seine, France, 7 m. s.e. of Paris; porcelain, earthenware, felt hats, gloves, etc. Pop. 15,900.

Chojnice (*hōi-nē'tse*), formerly

KONITZ, tn., Poland, 81 m. s. of Danzig; brushes, bricks, electrical works. Pop. 11,000.

Cholet (*shō-lā*), tn., Maine-et-Loire, France, 32 m. s.w. of Angers; linen manufactures; important agricultural centre. Pop. 17,900.

Cholon (*shō-lon*), tn., Cochín China, French Indo-China, 4 m. s.w. of Saigon; commercial centre; extensive rice trade. Pop. c. 200,000.

Cholula, anc. tn., Puebla, Mexico, 6 m. w. of Puebla; remarkable pyramidal temple (177 ft. high and 1,423 ft. on e. side of base), dedicated to the god Quetzalcoatl. Pop. 6,300.

Chomutov (*hō'mū-tof*), formerly KOMOTAU, tn., Bohemia, Czechoslovakia, 50 m. n.w. of Prague; lignite mines; textiles, paper; distilleries, breweries, and rly. workshops. Pop. 21,000.

Chorley, munic. bor., Lancashire, England, 9 m. s.e. of Preston; cotton manufactures; coal mines and metal working. Pop. 30,800.

Chorleywood, urb. dist., Hants, England, 18 m. n.w. of London; residential dist. Pop. 3,300.

Chorlu, tn., European Turkey, 60 m. w. by n. of Constantinople; manufactures carpets. Pop. c. 10,000.

Chosen (*chō-sen*). See KOREA.

Cho'ta Nag'pur, div., central Bihar and Orissa, comprising, in addition to the Brit. districts, several tributary states; mountainous; forest-covered; rich in minerals; other chief productions are rice, lace, and tussore silk. Area, 27,065 sq. m.; pop. 5,653,000.

Christchurch. (1) Tn., Hampshire, England, at junction of Rs. Avon and Stour; famous church dating from 1095. Pop. 9,200. (2) City, Canterbury, South I., New Zealand; bishop's see; cathedral, government museum; manufactures boots; iron and agricultural implement works. Centre of rich agricultural district. Pop. (with suburbs) 122,000.

Christiana. See OSLO.

Christiansand, fortified seapt., on fiord of Skagerrak, Norway, c. 170 m.

s.w. of Oslo; exports timber and fish. Pop. 16,500.

Christmas Island. (1) Brit. isl., Pacific Ocean, near equator, s. of Hawaii; discovered by Captain Cook, who celebrated Christmas here (1777); largest atoll in Pacific. (2) Isl., Indian Ocean, s. of Java; included in Straits Settlements (1900); exports phosphate of lime. Area, c. 62 sq. m.; pop. 1,160.

Chrudim (*chrood'yim*), tn., Bohemia, Czechoslovakia, 60 m. E. of Prague; manufactures agricultural implements; industries include manufacture of sugar, spirits, beer, and flour. Pop. 13,100.

Chuanchow, seapt., Fukien, China; centre of rice growing. Pop. c. 200,000.

Chubut (*choo-boot'*), terr., s. Argentine Republic; cattle breeding; cap. Rawson. Area, 93,427 sq. m.; pop. 32,900.

Chudleigh, mkt. tn., s.e. Devon, England, on R. Teign, 14½ m. by rail s.w. of Exeter; ruins of Bishop of Exeter's palace (1080). Pop. 2,000.

Chumbi Valley, Tibetan valley, Himalaya Mts., between Sikkim and Bhutan; main route from Bengal to Lhasa; by this route Sir F. Younghusband entered Tibet (1904). Elevation, 9,500 ft.

Chungking, commercial cap., prov. Szechwan, China, on Yangtze Kiang; treaty port; great entrepôt; exports include opium, silk, wax, beans, sugar; imports manufactured goods and machinery. Pop. c. 623,000.

Chuquibaca (*choo-ke-sá'ka*), dep., Bolivia, S. America; produces petroleum; grazing is carried on, and sheep, cattle, and llamas are raised; cereals are grown; cap. Sucre. Area, 36,132 sq. m.; pop. c. 242,000.

Chur, or **COTKE**, chief tn., Grisons, E. Switzerland; tourist resort; rich in antiquities; bishop's see. Pop. 15,600.

Church, urb. dist., s.e. Lancs, England, 4 m. E. of Blackburn; coal; print and dye works; chemicals. Pop. 6,300.

Church'ill. (1) Riv., Saskatchewan and Manitoba, Canada; flows through system of interconnected lakes; impeded by rapids; enters Hudson Bay. Length, 900 m. (2) Formerly **FORT CHURCHILL**, at mouth of Churchill R.; a station of Hudson's Bay Co., Manitoba, Canada; northern terminus of Hudson Bay Rly., on Hudson Bay.

Church Streeton, urb. dist., Salop, England, 12½ m. by rail s.w. of Shrewsbury; fine scenery. Pop. 1,700.

Chu'san Archipelago, group of islands off n.e. coast, China; chief products, tea, rice, tobacco, camphor, fish; largest island, Chusan.

Chuvash', rep., central Russia; R. Volga flows through n. portion; traversed by Trans-Siberian Rly. from Moscow; extreme climate; forests in s.; chief crop, oats; cattle and poultry products exported; chief tn., Cheboksari, 125 m. E. of Nijni-Novgorod. Area, 7,107 sq. m.; pop. 895,000.

Cicero (*sís'erō*), tn., Illinois, U.S.A., 7 m. W. of Chicago; manufactures electrical apparatus, engines, pumps, enamelled ware. Pop. 66,000.

Cienfuegos (*thē-ān-fu-á'gōs*), tn., s. Cuba; magnificent landlocked harbour; centre of sugar trade. Pop. 73,500.

Cieszyn. See **TESCHEN** (2).

Cieza (*thē-ā'tha*), tn., s.e. Spain, 24 m. N.W. of Murcia; flour and paper mills; and produces wines, esparto grass, grain. Pop. 13,700.

Cilli, or **CELJE** (*sē'lye*), tn., Slavonia, Yugoslavia, 38 m. N.E. of Ljubljana; coal mines; zinc-smelting furnaces; museum contains Roman remains. Pop. 7,700.

Cincinnati, second largest tn. of Ohio, U.S.A., on N. bank of Ohio R.; has important public buildings; archiepiscopal see of R.C. church and episcopal see of Prot. church; univ. (1873) is the only munic. univ. in U.S.A.; fine system of parks; important trading, railway, and industrial centre. Chief industries are

transport of grain and trade in pork; manufactures include making of clothes, furniture, leather, shoes, tobacco, cutlery, saddlery, carriages; large river and canal traffic. Pop. 449,000.

Cinque Ports (*sank*), old name given to the five ports of Hastings, Romney, Hythe, Dover, and Sandwich; to these Winchelsea and Rye were added in the reign of Henry III. and other small places incorporated, the whole forming a jurisdiction for the defence of the coast of Kent and Sussex.

Cin'tra, tn., Estremadura, Portugal, 14 m. N.W. of Lisbon; beautifully situated; contains Moorish relics; by Convention of Cintra (1808) Napoleon undertook to evacuate Portugal. Pop. 7,100.

Circassia, region, w. Caucasus, part of North Caucasian Area, Russia; lies between Kuban R. and Black Sea; mountainous; Circassians are noted for their beauty, and are Mohammedans.

Cirencester (*sir-en-ses'ter* or *sir-et-er*), mkt. tn., Gloucester, England, 15 m. S.E. of Gloucester; 15th cent. church with three-storeyed porch; agricultural industries; contains Royal Agricultural Coll. Pop. 7,200.

Città di Castello (*chit'a dè kas-tel'o*), tn., episc. see, Italy, on R. Tiber, 26 m. N. of Perugia; mineral springs in vicinity; fine Renaissance buildings. Pop. 30,000.

Città Vecchia (*chit'ta vek'ke-a*), fort. city, Malta; bishop's see; cathedral. Pop. c. 6,000.

Ciudad Bolívar (*thè-oo-dad' bô-lé-vâr*), formerly ANGOSTURA, tn., cap. of Bolívar, Venezuela; commercial centre of Orinoco basin; trades in rubber, cattle, tobacco, coffee. Pop. c. 15,000.

Ciudad Porfirio Díaz (*thè-oo-dad' por-fé-ri-ô dî-âs*). See PIEDRAS NEGRAS.

Ciudad Real (*thè-oo-dad' râ-âl*). (1) Prov., Spain; intersected by riv. Guadiana; climate extreme; prod. grain, vegetables, wine; sheep, goats, and mules are reared. Area, 7,620

sq. m.; pop. 427,400. (2) Cap. of above; episc. see; market for cereals, oil, and wine of surrounding district. Pop. 19,000.

Ciudad Rodrigo (*thè-oo-dad' rô-dré-gô*), tn., Spain, near Portuguese frontier; trades in cereals, charcoal; manufactures soap, leather, linen, woollens; famous for siege during Peninsular War. Pop. 8,700.

Cividale del Friuli (*chè-vè-dal'â del frè-oo-lè*), tn., episc. see, Venetia, Italy, 10 m. N.E. of Udine; cathedral with baptistery (8th cent.); bridge (15th cent.); museum of antiquities; linen and cotton manufactures. Pop. 11,400.

Civita Vecchia (*chè-vè-tâ vek'e-a*), seap. tn., bathing-place, episc. see, Rome, Italy; cement works; sulphur springs and remains of Roman baths. Pop. 23,300.

Clackman'shan, co. tn., on Black Devon R., Clackmannanshire, Scotland; anc. market cross; ruins of Clackmannan Tower, once seat of Brucers; yarn mill; coal and ironstone mines; sandstone quarries. Pop. 2,600.

Clackman'shan, smallest co., Scotland; lies between Ochil Hills and Forth; bounded by Perth, Kinross, Fife, and Stirling; surface partly flat (carse), partly undulating and hilly; soil is fertile and well cultivated; uplands afford excellent pasturage; is rich in minerals, coal being extensively mined; woollen manufactures, distilleries, shipbuilding yards, and bottle and glass works. Chief towns, Alloa, Clackmannan (co. tn.), Alva, Dollar, Tillicoultry. Area, 55 sq. m.; pop. 31,900.

Clac'ton-on-Sea, urban dist., wat.-pl., Essex, England, 12 m. S.E. of Colchester. Pop. 15,000.

Clapham. (1) Parl. division, eccles. par., and part of civil par. of Wandsworth bor., S.W. London; residential suburb. Clapham Common is public park of 220 ac. Clapham Junction, which does not serve Clapham, is a great rly. centre. (2) Vil. and par., Yorkshire, England, 16 m. N.E. of

Lancaster; tourist centre; Ingleborough Cave, with stalactites, in vicinity. Pop. (par.) 600.

Clare, co., Munster, I.F.S.; bounded n. by Galway, e. by Tipperary, s. by Shannon estuary, w. by Atlantic; surface generally hilly, with some level tracts; bogs in w.; tracts of rich loam on banks of Shannon and Fergus; chief lake, Lough Derg, on eastern boundary; coast precipitous and much indented; chief islands, Aran Isles; important fisheries round coast, especially oysters; sheep and cattle raised; no important manufactures; agriculture neglected, except oats, potatoes. Minerals include iron, manganese, lead; mineral springs occur in several places. There are many old fortified castles. Chief tn., Ennis. Area, 1,230 sq. m.; pop. 95,000.

Clarksburg, tn., West Virginia, U.S.A., on R. West Fork, 90 m. N.E. of Charleston; in mining and agricultural area; glass, pottery, tinplate, bricks, tiles, machinery are produced. Pop. 29,000.

Clay Cross, urb. dist., N.E. Derbyshire, England, 4 m. s. of Chesterfield; coal and iron mines. Pop. 8,500.

Clayton-le-Moors, urb. dist., S.E. Lancs, England, 4½ m. N.E. of Blackburn; calico-printing, cotton, machinery, soap. Pop. 7,900.

Cleat or Moor, tn., Cumberland, England, 4 m. S.E. of Whitehaven; iron mining and engineering works. Pop. 6,600.

Cleburne, tn., Texas, U.S.A., 25 m. s. of Fort Worth; large railway workshops; flour mills; a shipping point for live-stock, cotton, and grain. Pop. 11,000.

Cleckheaton, tn., W. Riding, Yorkshire, England, 5 m. S.E. of Bradford; staple industries are manufacture of woollen and flannel goods. Pop. 12,500.

Clee thorpes, tn. and wat.-pl., Lincolnshire, England, 2 m. S.E. of Grimsby. Pop. 28,600.

Clerkenwell, northern par. in bor. of (3,601)

Finsbury, London, England; centre of watch making and jewellery.

Clermont-Ferrand (*klâr-mon' fer-rân*), chief tn., Puy-de-Dôme, central France; bishop's see; has famous mineral springs. Chief manufactures, preserves, semolina, chemicals, rubber goods; important grain and cattle market. Pop. 101,500.

Clermont-l'Hérault (*klâr-mon-lâ-rô*), tn., Hérault, s. France, 20 m. w. of Montpellier; woollen manufacture, tanning and leather dressing. Pop. 5,000.

Cleve, or **KLEVE** (Fr. *Clèves*), tn., Rhenish Prussia, Germany, about 2 m. from l. bk. of R. Rhine; manufactures boots, shoes, machinery, tobacco; mineral wells; growing summer resort. Cap. of former duchy of same name. Pop. 20,000.

Cleve don, urb. dist., N.E. Somersetshire, England; seaside resort. Pop. 7,000.

Cleveland. (1) Parl. dist., N.E. Yorkshire, England; chiefly moorland; crossed by Cleveland Hills, which are famous for exceedingly rich deposits of iron ore; numerous blast furnaces, supplying about one-third of the total pig-iron for Great Britain; fine breed of horses. Area, 420 sq. m. (2) City, Ohio, U.S.A., on s. shore of Lake Erie, and on Cuyahoga R., which forms inner harbour; northern terminus of Ohio Canal; great railway centre. Cleveland is chief centre in U.S.A. for iron ore; great lumber and coal trade; iron manufacture in all branches; petroleum refineries, meat-packing establishments, manufacture of clothing, paint, chemicals. Pop. 900,000.

Cleveland Heights, town, Ohio, U.S.A.; adjoins Cleveland, of which it is a residential suburb. Pop. 50,000.

Cleveleys, tn., Lancs, England, 4 m. N. of Blackpool; seaside resort. Pop. 2,920.

Cleves. See **CLEVE**.

Clif'ton, w. suburb of Bristol, Gloucestershire, England; mineral springs; Roman relics; famous public

school; suspension bridge over Avon gorge. (2) Tn., New Jersey, U.S.A., close to tn. of Passaic; manufactures include woollens, leather belting, steel goods, chemicals. Pop. 46,000.

Clinton. (1) City, E. Iowa, U.S.A., on Mississippi R.; seat of Wartburg Coll.; numerous mills; furniture and structural ironwork. Pop. 26,000. (2) Tn., Massachusetts, U.S.A., 15 m. N.N.E. of Worcester; prod. machinery, carpets, ginghams. Pop. 12,000.

Clith'eroe, munic. bor. and mkt. tn., Lancashire, England, 34 m. N. of Manchester; remains of 12th cent. castle; 16th cent. grammar school; cotton and paper mills. Pop. 12,000.

Clonakil'ty, seapt., mkt. tn., co. Cork, I.F.S., on Clonakilty Bay; breweries, corn mills, yarn. Pop. 2,800.

Clones, mkt. tn., w. Monaghan, I.F.S.; corn mills and agricultural trade; interesting ruins. Pop. 2,400.

Clonmacnoise, par., Offaly co., I.F.S., on R. Shannon; seat of religion and learning in anc. times; many remarkable antiquities. Pop. 700.

Clonmel, munic. bor., mkt. tn., co. Tipperary, I.F.S., on R. Suir; brewing, tanning; exports corn, cattle, provisions, butter. Pop. 9,000.

Clovel'y, vil., N. Devon, England, 11 m. S.W. of Bideford; on cliff, 400 ft. high; fishing; famed for picturesque scenery. Pop. 600.

Cluj (*klizh*), formerly KOLOZSVAR or KLAUSENBURG, tn., Transylvania, Romania; cap. of dep. of same name; intellectual centre of Transylvania; industries include making of textiles, paper, sugar, soap, earthenware. Pop. 110,000.

Clu'ny, tn., Saône-et-Loire, France, 12 m. N.W. of Macon; famous Benedictine Abbey (founded 910), now in ruins; great seat of learning, 11th and 12th cents.; paper, pottery, leather. Pop. 3,300.

Clu'tha, riv., S.E. Otago, South Island, New Zealand (named after R. Clyde, Scotland); drains Lakes Hawea, Wanaka, and Wakatipu;

alluvial deposits rich in gold; length, 154 m.

Clwyd, riv., Denbighshire, N. Wales, flows through picturesque valley for 31 m., and enters Irish Sea at Rhyl.

Clyde (anc. *Clutha*), riv., w. of Scotland; rises in S. borders of Lanarkshire; enters Firth of Clyde at Dumbarton; navigable for liners up to Glasgow; of great commercial importance, and principal shipbuilding centre in world; has celebrated falls, near Lanark, where there are hydro-electric power stations; valley famous for 'Clydesdale' horses; orchards; iron and coal fields; about one-third of population of Scotland found in its basin. Length, 105 m.; drainage area, 1,481 sq. m.

Clydebank, police and munic. burgh, Dumbartonshire, Scotland; extensive shipbuilding and engineering works; manufacture of sewing-machines. Pop. 47,000.

Coahuila (*kō-a-wē'la*), northern state, Mexico, adjoining Texas; rich in minerals; coal, copper, silver, and gold; agricultural products include cotton, Indian corn, wheat, and beans. Chief tn., Saltillo, in S.E. of state. Area, 63,786 sq. m.; pop. 393,500.

Coalbrookdale, eccles. dist. and vil., Shropshire, England, 4 m. S. of Wellington; iron, brick, and tile works; iron bridge across Severn here. Pop. 1,400.

Coal'ville, tn., Leicestershire, England, 5 m. S.E. of Ashby-de-la-Zouche; extensive coalfields; tile and brick making; iron foundries and brick works. Pop. 21,900.

Coast Range. See Rocky Mts.

Coatbridge, munic. burgh, tn., Lanarkshire, Scotland; centre of most important coal and iron dist. in Scotland; blast furnaces, tube works, boiler works, etc.; brick and tile works; technical school. Pop. 43,100.

Coates'ville, city, Pennsylvania, U.S.A., 35 m. W. of Philadelphia; industrial centre; iron, steel, brass foundries; silk mills. Pop. 15,000.

Coats Land, part of Antarctica, on E. shore of Weddell Sea.

Cobalt, tn., Ontario, Canada, c. 330 m. n. of Toronto; centre of rich silver district; also produces cobalt, arsenic, and nickel. Pop. 4,400.

Coban', tn., Guatemala, Central America, 60 m. n. of Guatemala City; centre of coffee trade. Pop. c. 23,000.

Cobar, municipality, post tn., New South Wales, Australia, 350 m. n.w. of Sydney; large copper mines in neighbourhood; gold and silver; also an important pastoral centre. Pop. c. 1,500.

Cobh (*kôe*), formerly **QUEENSTOWN**, tn., seaport, and port of call, co. Cork, I.F.S.; situated on Great Island, Cork Harbour; is port of call for U.S.A. mail steamers; naval docks. Pop. 7,190.

Cobham, or **CHURCH COBHAM**, par. and vil., Surrey, England, on R. Mole, 6½ m. w. of Epsom; in wooded country; sawmills. Pop. (par.) 5,100.

Coblentz (*kô'blents*), fortified town, cap. of Rhine Province, Prussia, Germany, at confluence of Rs. Rhine and Moselle; contains many fine buildings; centre of wine trade, and manufactures pianos, paper, machinery, and chemicals. Pop. 58,200.

Cobourg, tn., Ontario, Canada, on Lake Ontario; woollen mills, carpet factories, foundries. Pop. 5,300.

Coburg, manufacturing tn., N. Bavaria, Germany; many fine buildings and monuments, including statue of Prince Albert, erected by Queen Victoria (1865); important trade in cattle; manufactures include machinery, glass, and porcelain; there are iron foundries and sawmills. Pop. 24,700.

Cocaná'da, tn. and seapt., Madras, India, n. of R. Godavari delta; chief exports, cotton, oil-seeds, and rice. Pop. 53,300.

Cochabamba (*kô'cha-bam'ba*). (1) Dep. of Bolivia, S. America; products include dyewoods, timber, wheat, maize, sugar, cocoa, and coffee, and the precious metals. Area, 25,288 sq. m.; pop. c. 650,000. (2) Cap. of above, 130 m. s.e. of La Paz; manufactures include cotton and wool-

len goods, leather, and earthenware; railway development is adding to its importance. Pop. 43,000.

Cochin (*kô-chên*). (1) Indian state, Madras, India, between Malabar and Travancore, a small portion of s.w. angle bordering Arabian Sea; surface generally occupies sloping plains; watered by numerous rivers forming series of shallow lagoons, subject in wet seasons to sudden floods; communication chiefly by boat; teak forests; rice, coconuts; cap. Ernakulam. Area, 1,418 sq. m.; pop. 979,000. (2) Seapt. tn., Malabar dist., Madras, India; first European fort built in India (1503); shipbuilding; exports coconut oil, coir, and tea. Pop. 20,600.

Cochin-China, colony, French Indo-China, bounded n. by Cambodia and Annam, s.e. by S. China Sea, w. by Gulf of Siam; surface mainly broad plain; mountainous in n.; watered by Mekong, Donnai, and other rivers; monsoon climate; chief prod. are rice, rubber, maize, cotton, fruits; river and coast fisheries. Majority of inhabitants are Annamese; religion, Buddhism; cap. Saigon. Area, 26,476 sq. m.; pop. 4,002,000.

Cocken'zie and Port Seton, combined police burgh in par. of Tranent, E. Lothian, Scotland, on Firth of Forth; fishing and coal mining. Pop. 2,500.

Cock'ermouth, mkt. tn., Cumberland, England, 23 m. s.w. of Carlisle; anc. castle (14th or 15th cent.); Wordsworth's birthplace; extensive coal mines in vicinity. Pop. 4,800.

Co'cos, isl., Pacific Ocean, off w. coast of S. America, to n. of Galapagos Islands; reputed site of pirates' buried treasure.

Co'cos (or **KEELING**) **Islands**, group of twenty-three atolls, Indian Ocean, 581 m. w. of Java; under Brit. protection since 1857; politically part of Singapore; copra, coconuts. Pop. c. 800.

Cof'feysville, city, s.e. Kansas, U.S.A., near border of Oklahoma; oil, zinc, bricks, flour; important shipping point for grain. Pop. 16,200.

Coggeshall, tn., Essex, England, 6 m. E. of Braintree; ruins of priory; silk and velvet. Pop. 2,600.

Cognac (*kōn-yak'*), tn., Charente, w. France, on R. Charente; viticulture and manufacture of 'cognac'; cooperage, bottle works. Pop. 16,500.

Cohoes (*kō-hōs'*), city, New York, U.S.A., 9 m. N. of Albany; manufactures knitted goods from cotton, wool, worsted; paper mills, foundries. Pop. 23,000.

Coimbatore (*kō-im-bā-tōr'*). (1) Dist., Madras, India; flat country hemmed in by mountains on N., W., and S.; drained by Cauvery and feeders; pulses, tobacco, coffee; large forests with valuable timber. Area, 7,225 sq. m.; pop. 2,220,000. (2) Cap. of above, 80 m. S.E. of Calicut; cotton spinning, coffee, sugar. Pop. 65,800.

Coimbra (*kō-ēm'bra*). (1) Dist., Beira, Portugal. Area, 1,508 sq. m.; pop. 353,100. (2) Cap. of above, on R. Mondego; former cap. of Portugal; cathedral; important for its university, the only one in the country. Pop. 20,800.

Coin (*kō-in'*), tn., Malaga, s. Spain, 20 m. S.W. of Malaga; marble quarries; fruit. Pop. 11,600.

Coire (*kuar*). See CHUR.

Colchagua (*kōl-chūg'ua*), prov., Chile, S. America; cap. San Fernando, 83 m. S. of Santiago; stock raising and mining are the chief industries; wheat, fruit, wine are exported. Area, 3,851 sq. m.; pop. 166,300.

Colchester, mkt. tn. and riv. port, Essex, England, on R. Colne; castle—largest specimen of Norman architecture in England; remains of Augustinian Priory of St. Botolph; many churches; grammar school (founded 1539); market for oyster fisheries and agricultural produce, annual 'oyster feast.' Pop. 48,600.

Coldstream, par. and police burgh, Berwickshire, Scotland, on R. Tweed; 'Coldstream Guards' raised here (1650) by General Monck; fishing centre; formerly matrimonial haven

for runaway couples. Pop. (par.) 1,200.

Coleford, urb. dist., Glos, England, 4½ m. E.S.E. of Monmouth; on border of Forest of Dean; coal mines. Pop. 2,800.

Coleraine (*kōl-rân'*), port and mkt. tn., co. Londonderry, N. Ireland, on R. Bann; extensive linen industry, distilling, fisheries (salmon and eel). Pop. 8,100.

Coleshill, mkt. tn., Warwickshire, England, on R. Cole, 8½ m. E. of Birmingham; Home for poor children. Pop. 3,250.

Colima (*kō-lī'ma*). (1) Small mountainous state, Mexico, on Pacific coast; on N. frontier is active Volcan de Colima (12,750 ft.); sugar, rice, maize, coffee; copper. Area, 2,272 sq. m.; pop. 91,800. (2) Tn., cap. of above; cotton, cigarettes; commercial centre. Pop. 28,300.

Coll, isl., Argyllshire, Scotland; one of Inner Hebrides, W. of Mull; dairy farming, sheep rearing; harbour at Arinagour. Pop. 400.

Collingwood. (1) Tn., Victoria, Australia; suburb of Melbourne; tanneries, breweries. Pop. c. 35,000. (2) Tn., Ontario, Canada, 90 m. N.W. of Toronto; shipbuilding yards and steel works. Pop. 5,900.

Colmar, tn., Haut-Rhin, E. France; textile industries; bleaching and brewing; vineyards. Pop. 38,700.

Colne (*kōn*). (1) Munic. bor. and mkt. tn., Lancashire, England, 5 m. N.N.E. of Burnley; cotton. Pop. 23,800. (2) Riv., Essex, England; oyster fisheries.

Cologne (*kō-lōn'*), or KOLN, tn., Rhine Prov., Prussia, on R. Rhine; one of principal western fortresses of Germany. From its position at head of Rhine navigation for sea-going vessels, as centre of rail and river systems, and being near rich coal and iron field, Cologne has great commercial importance; archiepiscopal see; has magnificent Gothic cathedral, several other fine churches, and other interesting buildings; manufactures include cottons, wool-

lens, beet sugar, chemicals, spirits of wine, eau-de-Cologne, tobacco, machinery, chocolate, carriages, porcelain, soap. Pop. 698,300.

Colombes (*kô-lonb'*), tn., Seine, France, 3 m. n.w. of Paris; petroleum refineries; manufactures vinegar and measuring instruments. Pop. 42,300.

Colombia, republic, S. America; bounded n. by Caribbean Sea; E. by Venezuela, Brazil; s. by Peru, Ecuador; w. by Pacific, Panama. Extreme length, 1,050 m.; width, 860 m. From Pasto in s.w. corner three Cordilleran ranges spread out northwards, like ribs of fan. Main ranges are Western, Central, and Eastern Cordilleras; intervening valleys drained by Cauca and Magdalena rivers. These valleys are richly wooded. Unhealthy, swampy plains or llanos in E. are drained by head-waters of Orinoco. Climate varies greatly, ranging from tropical to arctic conditions according to elevation; rainy season, Oct. to Dec.; dry season, Dec. to Feb. Most of inhabitants live on plateaus, which are treeless but well-watered prairies, of which those of Antioquia and Bogotá are most important. The country is subject to earthquakes. Agricultural products include coffee, tobacco, cotton; cocoa, sugar, vegetable ivory, dyewoods, wheat and maize. On llanos in E. cattle are reared. Country is rich in minerals, gold, coal, copper, lead, platinum, cinnabar, petroleum, emeralds, and manganese being the chief; there are valuable pearl fisheries along coast. Manufactures include textiles, cigars, cigarettes, but are as yet little developed. Chief exports, coffee, hides, bananas, gold, platinum. Cap. Bogotá, standing 8,700 ft. above sea-level. Area, 440,846 sq. m.; pop. 5,855,000.

Colombo, cap. and principal seaport, Ceylon, on w. side of isl.; extensive trade; great entrepôt; magnificent artificial harbour; port of call for Eastern steamers; coaling station; seat of Anglican and R.C. bishops;

many fine buildings; fresh-water lake. Pop. 244,100.

Colon (*kô-lon'*), or ASPINWALL, seaport, Panama; spacious harbour; Atlantic terminus of Panama Canal and Panama Rly. American control of sanitation has made Colon one of healthiest tropical cities in the world. Pop. c. 33,000.

Col'onsay and **Or'onsay**, two islands, Inner Hebrides, Argyllshire, Scotland; former is traditional landing-place of St. Columba (563); sheep rearing. Pop. 284.

Colorado. (1) W. central state of U.S.A., bounded n. by Wyoming and Nebraska; E. by Nebraska, Kansas; s. by Oklahoma, New Mexico; w. by Utah. Surface shows two natural divisions—great plains in E., mountains in W., where Rocky Mts. cross the state in several ranges; highest peaks—Mt. Elbert, Mt. Harvard, Pike's Peak, all over 14,000 ft. Chief rivers are Grand in W., Arkansas and S. Platte in E. Climate varies with elevation; generally healthy; rainfall slight. Colorado is pre-eminently a mining country; produces immense quantities of gold and silver; large deposits of lead, zinc, iron ore, copper, anthracite, and bituminous coal; also produces petroleum, bismuth, mica, tungsten, and radium. Mineral springs occur in various places. Agriculture has improved since development of system of irrigation; wheat, oats, maize, barley, potatoes, hay produced; fruits and vegetables grown; sugar-beet is largely cultivated. Horses, cattle, sheep, and pigs raised in considerable numbers. Industries include metal smelting and refining, meat packing, flour milling, brewing, dairying, manufacture of machinery, cars, beet-sugar. Cap. Denver. Area, 103,948 sq. m.; pop. (est.) 1,090,000. (2) River of south-western U.S.A., formed by union of Green and Grand rivers; flows s.w. through dry tableland and southern part of Utah into Arizona; afterwards separates Arizona on E. from Nevada and California on W.; enters Gulf of California; course

forms several remarkable cañons of great depth; Grand Cañon of the Colorado (attaining depth of 6,000 ft.) extends over 200 m. in length, 8 to 10 m. in breadth—total length of riv., c. 1,800 m. (3) Riv., Texas, U.S.A.; 650 m. long; flows roughly s.e. and enters Gulf of Mexico. (4) Riv., Argentina, S. America; rises in Andes and flows generally s.e. to Atlantic.

Colo'rado Springs, city, on E. side Rocky Mts., Colorado, U.S.A.; fashionable summer and health resort; pleasant climate; Manitou mineral springs in vicinity; smelters, and reduction mills. Pop. 33,000.

Colum'bia. (1) City, S. Carolina, U.S.A.; cap. of state; at head of navigation of Congaree R.; seat of univ. of S. Carolina; various colleges; cotton mills, ironworks. Pop. 50,000. (2) City, Missouri, U.S.A., 26 m. N. of Jefferson City; seat of univ. of Missouri; lumber, flour. Pop. 10,400. (3) Tn., Pennsylvania, U.S.A., 70 m. W. of Philadelphia; trading and shipping centre. Pop. 10,800. (4) Tn., Tennessee, U.S.A., 36 m. S. of Nashville; live-stock; textiles. Pop. 5,500.

Columbia, BRITISH. See BRITISH COLUMBIA.

Columbia, DISTRICT OF. See WASHINGTON (2).

Columbia River, or OREGON, large riv., N. America, 1,400 m. long; rises in Brit. Columbia, on W. slope of Rocky Mts.; flows first s.w., then turns S. and passes into United States, s.w., through Washington; forms part of N. boundary of Oregon and Washington; enters Pacific; principal affluents, Clark's Fork and Snake R.; navigable for sea-going vessels to 100 m. from its mouth; by the construction of canals for the avoidance of numerous falls and rapids river steamer traffic will be further developed; salmon fisheries are very important.

Colum'bus. (1) Cap. of Ohio, U.S.A., on Scioto R.; important commercial and industrial centre; trades in

grain, live-stock, wool, coal, iron; manufactures include carriages, machinery, shoes, soap. Pop. 289,000. (2) Tn., Georgia, U.S.A., on border of Alabama; cotton goods and machinery. Pop. 43,000. (3) City, Mississippi, U.S.A., near border of Alabama; cotton, cotton-seed oil, and dairy produce. Pop. 10,500. (4) City, Indiana, U.S.A., 40 m. S.S.E. of Indianapolis; tanneries; agricultural implements; furniture. Pop. 10,000.

Col'wyn Bay, urban dist., wat.-pl., Denbighshire, Wales; fine promenade. Pop. 20,900.

Comayagua (*kō-mi-ā'g'wa*), tn., Honduras, Central America; cathedral; has much declined within the last hundred years. In 1827 pop. was 18,000, now it is only c. 7,000.

Combe Martin (*koom*), par. and vil., N. Devon, England, 6 m. E. of Ilfracombe; market gardens. Pop. (par.) 2,000.

Comines (*kō-mēn'*), or COMMINES, frontier tn., Flanders; divided by Lys R. into two parts, Belgian and French; textiles. Pop. (Belgian) c. 7,000; (Fr.) c. 6,000.

Comiso (*kō'mē-sō*), tn., S.E. Sicily, 8 m. W. of Ragusa; pottery, cotton, soap. Pop. c. 25,000.

Commentry (*kōm-mon-trē'*), tn., Allier, central France, 7 m. S.E. Montluçon; centre of rich coalfield; ironworks, foundries. Pop. 7,200.

Co'mo. (1) Lake, Lombardy, Italy, at foot of Alps; beautiful scenery; tourist resort; exposed to sudden and violent storms. Length, 35 m.; area, 55½ sq. m. (2) City, cap., prov. Como, Lombardy, Italy, at S.W. extremity of Lake Como; bishop's see; many fine old buildings and Roman relics; district rich in orange groves and olives; manufactures silk, satin, velvet, gloves. Pop. 48,100.

Comorin', CAPE, southern extremity, India; temple of goddess Kanniyambal on headland.

Com'oro Islands, volcanic archipelago, Mozambique Channel, E. Africa; French colony ranking as prov. of Madagascar; principal islands, Great

Comoro, Anjuan, Mayotta, and Mohéli; mountainous; loftiest heights, 8,300 ft.; fertile soil; inhabitants, Arabs, Malagasy, Negroes; religion, Mohammedan; coconut palm oil; export hides, cane sugar, vanilla, and copra; turtle fishing. Area, c. 800 sq. m.; pop. 119,300.

Compiègne (*kon-pê-ân'*), tn., Oise, France, c. 50 m. N.N.E. of Paris; formerly fortified; favourite residence of Fr. kings; summer resort; royal palace, now used as museum of antiquities; canvas, rope making, boat building, and copper and iron founding are chief industries. Compiègne Forest (30,000 acres), formerly favourite hunting ground, now magnificent recreation park. Pop. 14,400.

Concarneau (*kon-kâr-nô'*), seapt., Finistère, N.W. France; sardine and mackerel fisheries; resort of artists. Pop. 5,700.

Concepcion (*kon-sep-sê-ôn'*). (1) Prov., Chile, S. America; immense fertile plains; coal mines; chief prod. are wheat, flour, wine, cattle, wool, and timber. Area, 3,313 sq. m.; pop. 246,700. (2) Tn., episc. see, cap. of above; important manufacturing and trading centre; chief industries are flour milling, distilling, and brewing; frequently destroyed by earthquakes. Pop. 64,000. (3) Or VILLA CONCEPCION, city, Paraguay, on Paraguay R.; chief centre for export of yerba maté tea. Pop. c. 11,000.

Concord. (1) Tn., cap., New Hampshire, U.S.A.; famous granite quarries; machinery, textiles, printing and publishing. Pop. 25,000. (2) City, N. Carolina, U.S.A., 20 m. N.E. of Charlotte; cotton and textiles. Pop. 12,000. (3) Tn., Massachusetts, U.S.A., 18 m. N.E. of Boston; scene of first fight in Amer. War of Independence; famous literary centre; textiles. Pop. 7,000.

Concor'dia, tn., Argentina, on Uruguay R., with port 2 m. lower down; exports meat, hides. Pop. 20,100.

Concigliano (*kon-dî-yê-nô'*), town, Venetia, Italy, 30 m. N. of Venice; wine, silk. Pop. 15,000.

Co'ney Island, popular seaside resort, at entrance to New York Harbour, at S.W. extremity of Long Island.

Congleton, munic. bor. and mkt. tn., Cheshire, England, 11 m. N.E. of Crewe; silk; cotton weaving; iron and brass foundries. Pop. 12,900.

Cong'o, largest river of Africa, formed by union of two streams, the Luapula, which issues from Lake Bangweulu and flows through Lake Mweru, and the Lukuga from Lake Tanganyika. The united waters, known as Lualaba, flow N. to Nyangwe, after which the name Congo is given to the river. Congo then flows N. as far as equator, when it curves to N.W. as far as 2° N., after which it turns S.W., entering sea at Banana; length, c. 3,000 m.; drains area of c. 1,425,000 sq. m. Principal tributaries are Aruwimi from E., Ubangi from N., Lomami and Kasai from S. Kasai, the chief southern trib., has numerous affluents, and joins Congo near Ngato. From its mouth the Congo is navigable for ocean steamers to Matadi (c. 100 m.); from Matadi to Stanley Pool (c. 200 m.) rapids make navigation impossible, but a railway has been constructed for the transit of goods and passengers; from Stanley Pool to Stanley Falls (c. 1,600 m.) navigable for boats of 4 ft. draught.

Congo, BELGIAN, Belgian colony, comprising practically basin of riv. Congo, and small part of basin of Upper Nile, Africa; bounded by French Equatorial Africa, Sudan, Uganda, Tanganyika Terr., N. Rhodesia, and Angola. Surface generally a depression, which not improbably was formerly occupied by inland sea; great part covered by trackless primeval forests, and surrounded by highlands and hills; chief lakes are Leopold II., Tumba, in W.; Tanganyika, Mweru, on E. boundary. Climate is tropical. There are many tropical fruits; chief products are rubber, palm oil, coffee, tobacco, maize, rice, corn, cacao, and ivory; cattle are bred. Minerals are important, and

include copper in Katanga dist., gold, iron, and tin. By a railway line passing through Bukama, Kambwe, and Elisabethville, which connects with the n. terminus of the Rhodesian railways, Katanga is brought into direct communication with Cape Town and with Beira, to which latter port the Katanga copper is sent. Principal exports are rubber, ivory, palm oil, copal, gold, copper, diamonds, tin, and cotton. Communications include the Congo and its tributaries, which are navigable to an extent of 5,500 m. There is a railway mileage of c. 2,200 m. Chief settlements are Boma, Banana, Leopoldville (cap.), Matadi, Stanleyville, Coquilhatville, and Elisabethville. Area, c. 918,000 sq. m.; pop. 8,520,000, of which about 20,700 are white.

Conisbrough, urb. dist. and par., W. Riding, Yorkshire, England, on R. Don, 5 m. s.w. of Doncaster; in a colliery district. Pop. 18,200.

Coniston. (1) Vil., Lancashire, England, at head of Coniston Water; tourist centre; slate quarries near. Pop. 1,700. (2) CONISTON WATER, lake, Lancashire, England, in Lake District. The mountain, Coniston Old Man, lies to w. of head of lake.

Conjeeveram, tn., Madras, India, 40 m. s.w. of Madras city; one of most sacred cities of India; several large temples, numerous pagodas; silk and cotton weaving. Pop. 61,400.

Con'nah's Quay, urb. dist., Flint, Wales, 3½ m. s.e. of Flint; seaport. Pop. 6,000.

Con'naught, or CONNACHT, w. prov., I.F.S., comprising counties of Mayo, Galway, Leitrim, Roscommon, and Sligo; mountainous in w.; principal riv., Shannon; fine scenery; sheep rearing, agriculture, and fishing; formerly Irish kingdom ruled by O'Connors; divided into counties about 1580. Area, 6,611 sq. m.; pop. 552,900.

Connecticut (*hon-eh'-i-kut*). (1) New England state, U.S.A.; bounded n. by Massachusetts, e. by Rhode I., s. by Long I. Sound, w. by New York.

Surface generally consists of three river valleys, Connecticut flowing through middle of state, Thames through e., and Housatonic through w. In e. and w. are hilly districts. Climate is temperate. Average annual rainfall, 50 in. River valleys are fertile, especially that of Connecticut R.; produce maize, rye, oats, potatoes, wheat, buckwheat, and great quantities of hay; tobacco largely cultivated; fruits produced, including apples, peaches; horses, cattle, sheep, and pigs raised; dairying carried on; fine lobster and oyster fisheries along coast. Minerals include brownstone, iron ore, tungsten, nickel, lime, cobalt, trap-rock. Mineral springs occur in various places. Connecticut is great industrial state, manufacturing cottons, woollens, silks, paper, machinery, clocks, brass goods, rubber articles, hosiery, leather, etc.; watch making at Waterbury, firearms and machinery at Bridgeport, hats at Danbury. Chief towns are Hartford (cap.), New Haven, Bridgeport. Area, 4,965 sq. m.; pop. 1,380,600. (2) River, New England, U.S.A., rises extreme n. of New Hampshire, flows s., forming boundary between New Hampshire and Vermont; enters Long I. Sound at Saybrook. Length, 345 m.

Con'nellsville, tn., Pennsylvania, U.S.A., 37 m. s.e. of Pittsburgh; largest coke industries in U.S.A.; manufactures machinery and motor-cars. Pop. 13,800.

Connemara, dist., w. Galway, I.F.S.; mainly mountain and loough; wild, romantic scenery; building stone and (Connemara) marble quarried.

Con'sett, urban dist., Durham, England, 12 m. s.w. of Newcastle; iron and steel works; coal mines. Pop. 12,300.

Con'stance. See KONSTANZ.

Constance, LAKE (Ger. *Bodensee*), expansion of Rhine, between Switzerland, Austria, and Germany; glacial origin; shores hilly and picturesque; remains of prehistoric dwellings. Area, c. 208 sq. m.

Constanta (*con-stan'tsa*), seapt., Black Sea, Romania; owes its importance to its being Romania's chief outlet to the Black Sea; main exports are oil and cereals; mineral springs in the neighbourhood. Pop. 65,000.

Constan'tia, dist., Cape of Good Hope, Africa, adjoining Cape Town; noted for excellence of wines it produces; originally Dutch wine farm (1680); government experimental wine farm; fruit.

Constantine's, tn., N. Algeria; situated on rocky hill, with ravines surrounding it on three sides; episc. see; has citadel, mosques, bey's palace; manufactures woollens, leather goods; centre of wheat trade. Pop. 88,500 (41,500 Europeans).

Constantino'ple (Turkish *Istambul*), tn., European Turkey; built on several hills; beautifully situated; surrounded on three sides by water: Sea of Marmara and Bosphorus on s. and E.; and on N.E. side the Golden Horn separates city proper from Galata-Pera, the centre for business and for the Christian European community, forming a safe, spacious, and deep harbour, about five miles long and half a mile broad, bridged at two points. Scutari, on Asiatic side of Bosphorus, is reckoned a suburb of Constantinople. The city proper lies to the s., and contains most of the finest buildings—e.g. the Mosque of St. Sophia, the interior of which, with its dome, marbles, and mosaics, is of marvellous beauty. There are in all 800 mosques. In extreme S.E. stands the old Serai, within whose high walls were the divan and harem of former sultans, and whose famous gate (Sublime Porte) gave its name to the sultan's government. Till 1924 the capital of Turkey. Streets are mostly ill-paved and crooked; houses are low and small, and business is transacted in bazaars. Pop. 673,000.

Constanza. See **CONSTANTA**.

Conversan'o, tn., Apulia, Italy, 16 m. S. of Bari; episc. see; has cathedral (11th cent.); castle. Pop. c. 15,000. (3,601)

Con'way. (1) Mkt. tn. and seapt., mouth of riv. Conway, Carnarvonshire, Wales; surrounded by high walls with battlements and towers; river crossed by fine bridges; Conway Castle (built by Edward I., 1284) is famous ruin. Pop. 8,800. (2) Riv. on which above is situated; navigable for small vessels for 10 m.; vale of Conway is favourite resort of artists.

Cooch Behar'. (1) Indian state, Bengal, India; near Himalayas; fertile and well cultivated; chief prod. are rice, jute, and tobacco. Area, 1,318 sq. m.; pop. 592,500. (2) Cap. of above, 270 m. N. by E. of Calcutta. Pop. 11,400.

Cook Islands, group in Pacific Ocean, lat. 20° S., long. 160° W.; principal islands are Rarotonga, Mangaia, Aitutaki, Atiu; dependency of New Zealand since 1901; coffee, fruits, coconuts. Area, 150 sq. m.; pop. 7,500.

Cooks'town, mkt. tn., Tyrone, N. Ireland; manufactures linen; trades in agricultural produce. Pop. 3,600.

Cook'town, seapt., on Endeavour riv., N. Queensland, Australia; gold and tin mines; pearl shell, turtle, and bêche-de-mer fisheries.

Coolgar'die, tn., W. Australia, 300 m. E. of Perth; gold first discovered here in 1888; now relatively unimportant as a gold-mining centre. Pop. c. 2,000.

Coorg, prov., Brit. India; bounded N. and E. by Mysore, S. and W. by Madras. Surface mountainous; mostly covered by forests; crossed by W. Ghats; abundant rainfall; watered by Carvery and its affluents. Coorg produces coffee, rice, rubber, tea, and sandalwoods. Cap. Mercara. Area, 1,582 sq. m.; pop. 163,800.

Copenha'gen, cap. of Denmark; situated on E. shore of Zealand, with suburb Christianshavn, on island of Amager, connected at two places. The channel between Copenhagen and Slottsholm I. forms a spacious harbour and great naval station. Portion of town, cut off by canals,

forms Castle L., or Slottsholm, with many fine public buildings, including royal palace of Christiansborg, govt. buildings, univ. (1479), royal library, Thorwaldsen Museum. Most important commercial city of Denmark; its trade increased as the result of part of the port being made a free harbour in 1894; chief industries are shipbuilding and metal working; chief exports, butter, bacon, corn. A train ferry connects the city with Malmö in Sweden. Pop. 731,000.

Coplago', tn., Chile, on riv. of same name, 380 m. n. of Valparaíso; smelting works; exports gold, silver, and copper ore. Pop. 9,800.

Cop'ermine, river, Canada; rises in Lake Providence, flows n.w., and enters Coronation Gulf, in Arctic Ocean; not navigable because of rapids. Length, 300-400 m.

Coquilhatville, tn., Belgian Congo, on R. Congo; cap. of Equator Province.

Coquimbo (*kō-hēm'bō*), seapt. and prov., Chile, 200 m. n. of Valparaíso; chief industry, copper mining and smelting; exports copper, manganese, cattle, and hides; has cathedral. Pop. (tn.) 15,400; (prov.) 160,200.

Corà'to, city, Apulia, Italy, 25 m. w. of Bari; centre of agricultural dist. Pop. 49,000.

Corbeil (*kor-bā'ē*), tn., Seine-et-Oise, France, on R. Seine, 17 m. s. of Paris; has important flour mills, printing and paper works. Pop. 11,000.

Cor'bridge, mkt. tn., Northumberland, England, on R. Tyne, 3½ m. e. of Hexham; Roman remains. Pop. 2,400.

Cor'doba. (1) Prov., Andalusia, Spain, on s. slopes of Sierra Morena; traversed by Guadalquivir; plains produce fruit, wine, olives, grain; cattle and horses on slopes; coal, silver, zinc mined. Area, 5,300 sq. m.; pop. 565,200. (2) Cap. of above prov., on R. Guadalquivir; with Moorish walls, 8th cent. bridge, and magnificent 8th cent. mosque, now a Christian cathedral; remains of Moorish palace; famed for silver-

smith's work; manufactures textiles; distilling and brewing. Pop. 73,700.

(3) Prov., Argentine Republic; wooded mts. in n., pampa in s.; cattle rearing; copper, lead, and gold mining carried on to very limited extent. Area, 66,912 sq. m.; pop. 735,500. (4) Cap. of above prov., c. 400 m. n.w. of Buenos Aires; centre of wheat area; flour mills, shoe factory; trades in wool. Pop. 135,000. (5) Tn., Mexico, 55 m. s.w. of Vera Cruz; has cotton and woollen manufactures; trades in tobacco, coffee, and sugar. Pop. 10,300.

Corfe Castle, tn., Isle of Purbeck, Dorsetshire, England, on rly. to Swanage; ruined castle. Pop. 1,400.

Corfu'. (1) One of Ionian Islands, Greece, off w. coast; divided into three districts by mountain ranges; highest point, 3,000 ft.; beautiful scenery; exports oranges, wine, olive oil, grapes. Length, 40 m.; breadth, 20 m. Area, 270 sq. m.; pop. 106,200. (2) Seapt. on e. coast of above; good harbour. Pop. 32,200.

Cor'inth. (1) Anc. and modern city, on Gulf of Corinth, Greece. New Corinth has arisen since destruction of old town by earthquake (1858); lies some 3 m. distant from anc. site, but, notwithstanding completion of Isthmian Canal (1893), has regained little of Corinth's historic prosperity and splendour; exports currants, oil, silk, and cereals. Pop. c. 6,000. (2) GULF OF CORINTH or LEPANTO separates Hellas from Morea; shores fertile, but liable to earthquakes; scene of many battles. (3) ISTHMUS OF CORINTH separates Gulf of Corinth from Gulf of Ægina; connects Morea with Attica; ship canal (opened 1893). The ruins include the Isthmian Wall and the temple of Poseidon.

Corinto (*ko-rèn'tō*), seapt., Nicaragua, on Pacific coast; greater part of Nicaragua's foreign trade passes through the town; chief exports are coffee, sugar, hides, dyewoods, and cattle. Pop. c. 3,000.

Cork. (1) Co., Munster, I.F.S.; largest in Ireland; bounded by

Kerry, Limerick, Tipperary, and Waterford; generally hilly—in the w. mountainous and boggy, and in the e. rich and fertile. Mountain ranges divide Cork into parallel basins through which flow the rivers Blackwater, Lee, and Bandon. The coast, which is exceedingly indented, and is about 250 m. long, has many beautiful bays. Large number of islands off the coast, the most notable being Cape Clear I., most southerly point of Ireland. Dairy farming is extensively carried on. Minerals little worked. Most important manufactures are leather, tweeds, whisky, and beer. Principal towns are Cork (chief tn.), Cobh (Queenstown), Kinsale, and Youghal. Area, 2,880 sq. m.; pop. 365,700. (2) Cap. of above, on R. Lee, at head of Cork Harbour; railway centre; univ. coll.; dairy and agricultural school; industries are manufactures of motor-cars, tanning, distilling, brewing, ironfounding, woollens; exports butter, provisions, livestock, hides, eggs, etc. Pop. 78,500. (3) **CORK HARBOUR**, landlocked natural harbour at mouth of R. Lee; Cobh (Queenstown) is on Great I.; Spike I. is fortified.

Corleone (*kor-lá-ô'nā*), tn., Sicily, 25 m. s.s.w. of Palermo; two mediæval fortresses; mineral springs. Pop. 15,300.

Corner Brook, tn., w. coast, Newfoundland; near mouth of Humber riv. and on rly.; paper mills worked by power from Grand L. Pop. 2,000.

Corning, city, New York state, U.S.A., 75 m. s.s.e. of Rochester; centre of region producing dairy products and tobacco; manufactures include brick, terracotta, and glass. Pop. 16,000.

Cornwall. (1) Co., s.w. England; great promontory, bounded n. and n.w. by Atlantic, e. by Devon, s. by Eng. Channel; contains Lizard Point, most s. point of England, and Land's End, most w.; 25 m. w. by s. lie Scilly Islands, included in co. In w. are broken and picturesque hills and tors. The Tamar, Fowey, Fal, and

Camel are most important rivers. Coast is almost entirely rockbound, with unsurpassed cliff scenery. Over 70 per cent. of land is under crops and grass, chief crop oats; large numbers of cattle reared; market gardening in Penzance district. Formerly famous for tin, but few mines are now worked. Copper mines now practically abandoned; radium obtained from pitchblende at St. Ives; kaolin worked; granite and slate quarried; important fisheries and brisk coasting trade. Exceedingly rich in prehistoric antiquities. Cromlechs called *quoits* are the largest and most important known; monoliths, circles, avenues of stone, hut-dwellings, caves, cliff-castles, hill-castles, and ancient Christian crosses also found. Co. tn., Bodmin; principal ports are Falmouth, Penzance, and Hayle. Area, 1,356 sq. m.; pop. 318,000. (2) Port, Ontario, Canada, on St. Lawrence R.; manufactures woollen goods, cotton, pulp, paper, and flour. Pop. 12,500.

Coroman del Coast, name formerly given to part of e. seaboard of India, on w. shore of Bay of Bengal.

Corpus Christi, tn., s.e. Texas, U.S.A., at mouth of R. Nueces; fish, oysters, and vegetables, as well as cotton, are exported. Pop. 28,000.

Corrèze (*kor-âs*), dep., s.w. France; forms part of old prov. Limousin; surface hilly and mountainous; chief rivers, Dordogne, Vézère, and Corrèze; soil poor; climate variable; chief products are coal, iron, granite, wine, and timber; cereals are also grown and cattle raised; chief tn., Tulle. Area, 2,272 sq. m.; pop. 269,300.

Corrib, LOUGH, w. Ireland, in cos. of Galway and Mayo; drains by riv. Corrib to Galway Bay; length, 27 m.; extreme breadth, 7 m.

Corrientes (*kor-ê-enf'es*). (1) Prov., Argentine Republic, S. America, between rivers Paraná and Uruguay; forms vast plain; northern districts largely covered by swamps and lagoons; exports include timber, cotton, tobacco, oranges, rice, sugar, cattle,

and horses. Area, 33,535 sq. m.; pop. c. 421,000. (2) Cap. of above, on R. Paraná; port and commercial town. Pop. c. 35,000.

Cor'sham, or **CORSHAM REGIS**, mkt. tn., Wilts, England, $4\frac{1}{2}$ m. s.w. of Chippenham; quarries. Pop. 4,500.

Cor'sica (Fr. *Corse*), isl., Mediterranean Sea, belonging to, and dep. of, France; over 100 m. long and 50 m. broad; e. coast is exceedingly regular, but w. deeply indented; interior mountainous; chief summit is Cinto (8,881 ft.), in n.w. A large plain, fertile but marshy, extends from e. coast to foot of mts. Immense tracts of splendid forests, notably of chestnut trees and olives. Higher up are Alpine pastures with many sheep and goats. Most important agricultural products are olives, wines, fruits (notably lemons), and potatoes; important fisheries, also coral fishing; minerals include lead, copper, and antimony; granite and marble. Climate is salubrious, except on e. coast, where plain is malarious. Cap. is Ajaccio; other ports, Bastia and Calvi. Pop. is almost entirely Italian. Area, 3,367 sq. m.; pop. 289,900.

Cort'land, city, New York, U.S.A., 30 m. s. of Syracuse; manufactures include stoves, wire, wirecloth, and netting. Pop. 13,300.

Corun'na (or *Kor-onn'ya*). (1) Prov., n.w. Spain; bounded n. and w. by Atlantic Ocean; dist. is mountainous, but generally fertile; extensive fisheries; chief exports, farm produce, fish. Area, 3,051 sq. m.; pop. 708,600. (2) Cap. of above prov.; seapt.; has two old churches, two hospitals, arsenal, barracks, cigar factory; exports cattle, vegetables, sardines. Scene of Sir John Moore's repulse of the French and his death (1809). Pop. 62,000.

Cor'wen, mkt. tn., on R. Dee, Merionethshire, Wales; slate quarries near. Pop. 2,700.

Cos, or **STANKO**, isl., Aegean Sea, w. of Asia Minor; surface partly mountainous, partly fertile and well cultivated; fine climate. Exports wine

and raisins, melons, and other fruits; ceded to Italy by Treaty of Lausanne (1923). Chief town, Cos (pop. 10,000), on n.e. coast. Area, 115 sq. m.; pop. 16,100.

Cose'ley (*kōr'le*), suburb of Wolverhampton, Staffordshire, England; coal and iron mines in neighbourhood. Pop. 25,100.

Cosenza (*kō-sen'sa*), tn., archiepisc. see, Calabria, s.w. Italy; Gothic cathedral and ruined castle; iron and steel works; trades in wine, oil, silk. Pop. (com.) 32,600.

Coshoe'ton, city, Ohio, U.S.A., 68 m. n.e. of Columbus; trade centre for agricultural produce; manufactures paper, glass. Pop. 11,000.

Costa Rica (*kōs'ta rē'ka*), republic of Central America, stretching from sea to sea, and bounded by Nicaragua and Panama. The country is generally mountainous, with many volcanoes; earthquakes frequent; coast is flat, with dense forest lands on Atlantic slopes. Principal products are coffee and bananas. Other exports include cocoa, tropical woods, and hides. New rubber plantations are proving productive. Gold is mined in places; silver, copper, and other metals also found. Cap. San José. Area, c. 23,000 sq. m.; pop. 471,500.

Côte d'Azur (*kōt dāz-oor'*, 'the azure coast'), shores of Riviera, s.e. France; includes many tourist resorts. See RIVIERA.

Côte-d'Or (*kōt-dor*), dep., e. central France; surface elevated and well wooded in n.; Côte-d'Or Mts. in s.; chief rivers, Seine and Saône; good pastures; important vineyards give the dep. its name, 'Golden Hill-side'; famous Burgundy wines produced; fertile valleys and plains; chief industries, sheep and cattle rearing; iron and steel; chief tn., Dijon. Area, 3,391 sq. m.; pop. 328,900.

Cotentin (*kō-ton-tan*), peninsula, France, projecting into Eng. Channel; fertile and good pasture ground for cattle; butter; part of department of La Manche; chief town, Cherbourg.

Côtes-du-Nord (*kôt-doo-nor'*), dep., France, bordering Eng. Channel; part of anc. prov. of Brittany; traversed by chain of hills, running s.e. to n.w.; coast much indented; rivers short and navigable; climate humid; good pastures; chief occupations, fishing and linen manufacture; coast region produces wheat, hemp, flax; iron, slate, lime, freestone mined; chief tn., St. Brieuc. Area, 2,786 sq. m.; pop. 552,800.

Cöthen, or KÖTHEN (*koo'ten*), tn., Anhalt, Germany, 34 m. n.n.w. of Leipzig; ironfounding, manufacture of machinery; sugar and chemical works. Pop. 26,800.

Cotopaxi, an active volcano, Andes, Ecuador, S. America; loftiest active volcano in world (c. 19,600 ft.); frequent eruptions; first ascent by Reiss (1872); Whymper first to reach crater (1880).

Cotrone (*ko-trō'nā*), seapt., episc. see, Calabria, s. Italy, 30 m. n.e. of Catanzaro; cathedral, old castle; anc. *Croton*. Pop. c. 10,000.

Cots'wold Hills, range, Gloucestershire, England, extending s.w. to n.e. for upwards of 50 m., separating basin of Lower Severn from the sources of Thames; oolitic; highest point, Cleeve Cloud (1,134 ft.); well-wooded valleys; was long famous for breed of sheep now scarce.

Cottbus. See KOTTBUS.

Cot'tian Alps, name given to part of Alps between Maritime Alps and Graian Alps; highest peak is Monte Viso (12,609 ft.); railway crosses chain by Mont Cenis Tunnel.

Cott'ingham, urb. dist., E. Riding, Yorks, England, 4 m. n.w. of Hull; contains Hull waterworks. Pop. 6,200.

Conlommiers (*koo-lom-ē-ā'*), tn., Seine-et-Marne, France, 45 m. e. of Paris; industries, printing and tanning; cheese. Pop. 5,300.

Coulsdon and Purley, urb. dist., Surrey, England, 5 m. s. of Croydon. Pop. 37,700.

Council Bluffs, city, Iowa, U.S.A., on Missouri R.; important shipping,

railway, and industrial centre; manufactures agricultural implements, paper, machinery. Pop. 42,000.

Coupar-Angus (*koop'er*), mkt. tn., Perthshire, Scotland, 16 m. n.e. of Perth; ruins of 12th cent. Cistercian abbey; fruit farming, linen. Pop. 1,800.

Courbevois (*koorb-vuā'*), industrial suburb of Paris, France; bleaching; manufactures drugs and biscuits. Pop. 47,500.

Courcelles (*koor-sel'*), tn., Hainaut, Belgium, 5 m. n.w. of Charleroi; coal and iron. Pop. c. 15,500.

Courtrai (*koor-trā'*), (Flem. *Kortrijk*), tn., w. Flanders, Belgium, on the Lys, 27 m. by rail s.w. of Ghent; famous for its table linens and lace. Pop. 37,900.

Coutances (*koo-tans'*), tn., episc. see, Manche, France, 40 m. s. of Cherbourg; fine Gothic cathedral; 14th cent. aqueduct; black lace, woollens, leather; trade in cattle and horses. Pop. 5,700.

Cov'entry (*kuv'-*), city, mkt. tn., Warwickshire, England; ruined abbey; noted since Middle Ages for wool and dyeing trade; important centre for manufacture of motor-cars and bicycles; ribbons, watches, ironfounding. Area, 4,147 ac.; pop. 167,000.

Covilhã (*kō-vil'-yan'*), tn., Portugal, on e. slope of Serra da Estrela; mineral baths and springs in neighbourhood; manufactures coarse cloth, used by peasantry. Pop. 14,000.

Covington (*kuv'-*), city, Kentucky, U.S.A., on R. Ohio, opposite Cincinnati; famous suspension bridge across Ohio; furniture, machinery, leather, tobacco. Pop. 65,000.

Cow'al, peninsular district, Argyllshire, Scotland, between Firth of Clyde and Loch Fyne; mountainous in n.; fertile valleys in s.; noted coaching road; chief tn., Dunoon.

Cow'bridge, munic. bor., mkt. tn., Glamorganshire, Wales, 10 m. w. of Cardiff; wholly dependent on agriculture; good markets and cattle fairs. Pop. 1,000.

Cowdenbeath, police burgh, s. Fife, Scotland; centre of coal-mining industry. Pop. 12,700.

Cowes, seapt., wat.-pl., Isle of Wight, England; headquarters of Royal Yacht Club; celebrated regattas. Osborne House, former royal residence, presented to nation by Edward VII. as convalescent home for officers. Pop. (including E. Cowes) 14,800.

Cracow (*kra'kôw*), fort. city, on Vistula, Poland; intellectual and art centre of Poland. Notable buildings include Gothic cathedral, where Polish kings were crowned and buried; royal castle; univ. (founded 1364); chief industries, machinery, chemicals, tobacco, agricultural implements. Pop. 181,700.

Cradoek, tn., Cape Province, S. Africa, 130 m. N. of Port Elizabeth; wool. Pop. 6,800.

Crail, coast tn., E. Fife, Scotland; summer resort; lobster and crab fishing. Pop. 1,100.

Craiova (*kra-yô'vâ*), or **KRAJOVA**, tn., Romania; chief commercial tn. w. of Bucharest; trade in cereals, cattle, fish, and timber. Pop. 70,000.

Cramlington, urb. dist., Northumberland, England, 8 m. N. of Newcastle; coal mining. Pop. 8,200.

Cranbrook, mkt. tn., Kent, England, 12 m. E. of Tunbridge Wells; chief industries, hop growing and farming; grammar school (16th cent.). Pop. 3,800.

Cranley, or **CRANLEIGH**, par. and vil., Surrey, England, 8 m. S.E. of Guildford; formerly manufactured iron from local ore. Pop. (par.) 4,000.

Cranston, tn., Rhode I., U.S.A., adjoining Providence; includes several cotton manufacturing villages; extensive market gardening. Pop. 44,000.

Cranwell, par. and vil., Lincs, England, 4 m. N.W. of Sleaford; Cadet College for Air Force. Pop. (par.) 2,190.

Crawfordsville, city, Indiana, U.S.A., 40 m. N.W. of Indianapolis; centre for important stock-raising

area; manufactures machinery, wagons, carriages, etc. Pop. 10,100.

Crawley, par. and vil., Sussex, England, 7 m. N.E. of Horsham. Pop. (par.) 4,745.

Crayford, urb. dist., Kent, England, 8 m. S.E. of Greenwich; part of Greater London. Pop. 15,900.

Cred'iton, mkt. tn., near junction of Creedy and Yeo, Devonshire, England, 7 m. N.W. of Exeter; confectionery; large cattle fair. Pop. 3,500.

Cree'town, tn., small port, Kirkcudbrightshire, Scotland; granite quarries; dist. scene of part of Scott's *Guy Mannering*. Pop. 750.

Crefeld, or **KREFELD**, tn., Rhineland, Prussia; principal seat in Germany of silk and velvet manufacture; famous technical weaving school. Pop. 130,000.

Crêil (*kra-ê'*), tn., river port, Oise, France, c. 30 m. N. of Paris; iron and machinery; railway works. Pop. 10,300.

Crema (*kra'mâ*), tn., episc. see, Lombardy, N. Italy, 22 m. N.W. of Cremona; cathedral; centre of rich agricultural district; bell-casting industry. Pop. 11,900.

Cremona, tn., episc. see, cap. of Cremona prov., N. Italy, on R. Po; numerous old churches and palaces; manufactures silk, cotton, and musical instruments; famous violins by Amati, Stradivarius, and Guarneri were made here. Pop. 59,000.

Cres'wick, tn., Victoria, Australia, 86 m. N.W. of Melbourne; gold mines; agriculture. Pop. c. 3,700.

Crete, large Greek island in E. Mediterranean; most southerly part of Europe; length, 160 m.; breadth, 7 to 30 m. Coast is much indented and has good harbours—Suda Bay in N. and Kali Limenes in S. Four ranges run from E. to W.: Mt. Ida (8,070 ft.) lies in centre. The valleys are fertile under irrigation; rivers are often dry. Climate is delightful, the heat being tempered by sea breezes. Chief products are olive oil, wine of inferior quality, goats'-milk cheese, silk, leather, and fruits;

trade mostly with Turkey and Greece. Archaeological discoveries at the palace of Knossos in E. Crete prove the existence of an advanced civilization as early as 3,400 B.C. Chief tn., Candia. Area, 3,300 sq. m.; pop. 386,400.

Creuse (*kroos*), dep., central France; chief river, Creuse; surface hilly; climate cold and damp; soil poor, except in valleys, where leading industry is the rearing of cattle, horses, and sheep; coal found; principal products, rye, buckwheat, chestnuts, potatoes, fruit. Chief tn., Guéret. Area, 2,164 sq. m.; pop. 219,100.

Creusot (*kroos-ô'*), or CREUZOT, Lr. tn., Saône-et-Loire, France, c. 55 m. s.w. of Dijon; centre of coal and iron area; ironworks (1837) among largest in Europe; producing guns, armour-plate, locomotives, and machinery. Pop. 24,200.

Crevillente (*kra-vil-yen'tā*), town, s.e. Spain, 20 m. s.w. of Alicante; famed for melons. Pop. 11,200.

Crews (*kroo*), munic. bor., Cheshire, England; important railway junction; has extensive railway workshops. Pop. 46,100.

Crewkerne (*kroo'kurn*), mkt. tn., Somersetshire, England, 8 m. s.w. of Yeovil; manufactures sailcloth, webbing, and twine. Pop. 3,500.

Criccieth (*krik'yeth*), wat.-pl., s. Carnarvonshire, Wales; Welsh home of Mr. Lloyd George. Pop. 1,400.

Cricklade, mkt. tn., on R. Thames, Wiltshire, England; agricultural produce. Pop. 1,400.

Crieff, mkt. tn., summer resort, on riv. Earn, Perthshire, Scotland; manufactures woollen goods; Drummond Castle, famous for beauty of its gardens, is in neighbourhood. Pop. 5,500.

Crim'ea, peninsula, rep. U.S.S.R., between Black Sea and Sea of Azov, joined to mainland by isthmus of Perekop; Balaklava and Sevastopol have good harbours; Theodosia is ice-free. Crimea is divided into two regions by the Salgir, its largest river; in N. pastureland; in S. mountains,

forests, and health resorts; here Crimean War (1854-56) was fought. Prod. include grain, tobacco, wines, and fruit. Area, c. 10,000 sq. m.; pop. 700,000.

Crimmitschau, or KRIMMITSCHAU (*kri-mit'show*), tn., Saxony, Germany, on R. Pleisse, 24 m. w. of Chemnitz; manufacture of machinery, buckskin; wool spinning. Pop. 27,100.

Crinan Canal, across peninsula of Kintyre, Argyllshire, Scotland; between Ardrishaig and Crinan; constructed 1793-1801; takes vessels of 200 tons.

Croatia-Slavonia (*kro-ä'-sha-sla-vö-ni-ä*), dist. of Yugoslavia; bounded by Adriatic on s.w., and separated from Hungary on n.e. by rivers Drava and Danube; mountainous, with plains in n.e. There are extensive marshes. Area is intersected by the riv. Sava. Earthquakes are frequent in Zagreb district. Soil is fertile; staple crops are wheat, maize, pulse, potatoes, flax, hemp, tobacco. Wine is largely produced. Timber is an important product. Swine are reared in the oak forests of Slavonia; and cattle, sheep, and horses are bred. Agriculture is the main industry. Cotton and beautiful silk fabrics are produced. Cap. Zagreb (Agram). Area, 16,418 sq. m.; pop. 2,700,000.

Crom'arty. (1) Port, Ross and Cromarty, on Cromarty Firth, Scotland; the birthplace of Hugh Miller, geologist; fisheries; important naval base during Great War. Pop. 800. (2) Former co., Scotland, now joined with Ross to form the co. Ross and Cromarty. (3) FIRTH, opening into Moray Firth; accommodates the largest vessels; two hills, 'Sutors of Cromarty' (400-500 ft. high; c. 1,500 yds. apart), guard entrance.

Cro'mer, wat.-pl., Norfolk, England; crab fishing; has repeatedly suffered from encroachments of sea; Old Cromer now under the sea. Pop. 4,200.

Crompton, township, Lancashire, England, 2 m. N. of Oldham; cotton mills; colliery. Pop. 14,800.

Crook, urb. dist., Durham, England, 6 m. N.W. of Bishop Auckland; coal mines. Pop. 11,700.

Crosby, or **GREAT CROSBY**, coast tn., Lancashire, England, 6 m. N.W. of Liverpool; Merchant Taylors' schools for boys and girls respectively. Pop. 18,300.

Cross River, W. Africa; rises in Cameroons Mts.; enters Bight of Biafra; in last 60 m. flows through dense mango swamps; length, 500 m.

Crowborough, par. and vil., Sussex, England, 7 m. N.E. of Uckfield. Pop. (par.) 6,000.

Crowland, or **CROYLAND**, par. and mkt. tn., Lincolnshire, England, 8 m. N.E. of Peterborough; contains Benedictine abbey founded 8th cent., portion remaining is now used as parish church; curious Gothic triangular bridge for foot-passengers (14th cent.). Pop. 2,700.

Crowle, urb. dist., N. Lines, England, 6 m. E. of Thorne; flax grown. Pop. 2,800.

Crowthorne, par. and vil., Berks, England, 2½ m. S.E. of Wokingham; par. contains Wellington College and Broadmoor Lunatic Asylum. Pop. (par.) 4,000.

Croydon, co. bor., Surrey, England, part of Greater London; chiefly residential; handsome parish church and public buildings; air port; breweries; clock factory and bell foundry. Pop. 233,100.

Crudden Bay, summer resort, Aberdeenshire, Scotland, S. of Buchan Ness; golfing centre. Pop. 2,600.

Csaba. See under **Bécsás**.

Cuba, republic and largest of W. Indian islands, at entrance to Gulf of Mexico; 730 m. long; breadth, 20-90 m.; coast-line, c. 2,000 m., exceedingly dangerous for shipping owing to banks and reefs. There are numerous excellent harbours—notably Havana. In the Sierra Maestra Mts. Monte Turquino rises 8,397 ft. These mts. are densely wooded, and contain copper, iron, and other minerals. The W. is mostly low-lying plain land. The largest river is the Cauto (250 m. long).

The climate of Cuba is more temperate than that of other W. Indian islands, and healthy in highlands of the interior. During coldest months (Dec. and Jan.) the temp. seldom falls below 50° F., and during July and Aug. 83° is about the maximum. The rainy season lasts from May to Oct. Desolating hurricanes are frequent. Large tracts of forest are rich in mahogany, cedar, ebony, and other kinds of timber. A considerable portion of the island is devoted to cattle breeding. About half the cultivated land consists of sugar plantations, sugar being the most important product. Tobacco is the second largest product. Other products are sisal hemp, maize, coffee, cotton, cacao, and tropical fruits. Only industries of importance are cigar making and sugar manufacture. Chief trade is with U.S.A. Chief towns are Havana (cap.), Santiago, and Camagüey. Two-thirds of inhabitants are whites (mostly of Span. descent). Area, 44,164 sq. m.; pop. 3,579,500.

Cuckfield (*hook'feld*), urb. dist., Sussex, England, 14 m. N. of Brighton; fine views over Downs. Pop. 2,100.

Cuddalore, chief tn., S. Arcot, Madras, India, 20 m. S. of Pondicherry; chief exports are grain, sugar, oil-seeds, cotton goods. Pop. 50,500.

Cud'apah. (1) Dist., Madras, India; very unhealthy; watered by Pennar and tributaries; chief prod. are millet, rice, melons, and cotton; muslin manufactured. Area, 5,918 sq. m.; pop. 887,900. (2) Tn., cap. of above, 135 m. N.W. of Madras; exports cotton. Pop. 19,500.

Cud'worth, urb. dist., W. Riding, Yorks, England, 3 m. N.E. of Barnsley. Coal mining. Pop. 9,400.

Cuenca (*huen'ha*). (1) Inland prov., Spain, lying to W. of Valencia; mainly mountainous, valleys, forests; suffers from drought; main occupation of people is raising of sheep, goats, and mules; forests produce pinewood; coal and salt are mined; agriculture is very backward. Area, c. 6,636 sq.

m.; pop. 281,600. (2) City, cap. of above, 100 m. N.W. of Valencia; Gothic cathedral; trades in timber, and manufactures furniture, pottery, leather, and paper. Pop. 12,800. (3) City, s. Ecuador, S. America; cathedral, university; sugar refineries, woollen goods, and pottery. Pop. c. 30,000.

Cuevas de Vera (*kuv'as dā vā'ra*), tn., S.E. Spain, on R. Almanzora, 43 m. N.E. of Almería; dist. rich in silver mines; saltpetre; chief market for agricultural produce of dist. Pop. 20,400.

Culebra (*koo-lā'bra*). (1) Isl., W. Indies, between Porto Rico and St. Thomas; good harbour; U.S.A. naval base. Pop. 800. (2) Station, Panama; Culebra (Gaillard) Cut offered great difficulties in construction of canal.

Cul'len, royal and munic. burgh, Banffshire, Scotland, on Moray Firth; fishing centre; rope and sail making. Pop. 1,700.

Cullera (*kool-yā'rā*), seapt., Spain, 22 m. s. of Valencia; walled town; ruined Moorish citadel; exports grain, fruit. Pop. 13,100.

Cullinan, tn., Transvaal, S. Africa, 24 m. E. of Pretoria; centre of diamond-mining dist. The famous Cullinan Diamond was bought by the Transvaal Government and presented to Edward VII., stones cut from it being used in the British sceptre and crown. Pop. c. 11,800.

Cullo'den, moor, 6 m. N.E. of Inverness, Scotland, scene of defeat of Prince Charles Edward by Duke of Cumberland (April 16, 1746); also called Drummossie Muir; fine examples of stone circles on neighbouring plain of Clava.

Cullompton, or **COLLUMPTON**, mkt. tn., Devon, England, on R. Culm, 12½ m. N.E. of Exeter; blankets and serges; paper mills. Pop. 2,735.

Culross (*koo'ros*), royal burgh, par., Fife, Scotland, 6 m. W. of Dunfermline, on Firth of Forth; formerly important export of coal and salt, now mainly a holiday resort; has remains

of Cistercian abbey (1217). Pop. (par.) 4,100; (burgh) 500.

Cumana (*koo-ma-nā*), city and port, Venezuela; subject to earthquakes; products include coffee, cacao, sugar, tobacco, rum. Pop. 18,700.

Cum'berland. (1) Co., N.W. England, bordered by Scotland and Solway Firth in N. The centre is hilly; the W. and N.W. low and flat. The S.E. comprises part of the 'Lake District,' the largest lakes being Ullswater, Derwentwater, Bassenthwaite, Thirlmere, Buttermere, Wastwater, Ennerdale. Chief mts. are Scafell Pike (3,210 ft.), Scafell (3,162), Helvellyn (3,118), Skiddaw (3,053), Bow Fell (2,960), Cross Fell (2,929). The most important rivers are Eden, Esk, and Derwent; numerous waterfalls of great beauty. The climate is wet and variable, specially from July to Oct. Dairy farming very important; large numbers of sheep and cattle reared; oats produced; coal extensively worked; red hematite iron ore mined, and iron and steel manufactured; limestone, granite, slate, zinc, lead found; shipbuilding; fisheries. Chief towns are Carlisle (co. tn.), Cockermouth, Whitehaven, Workington, Maryport, Wigton, Penrith, and Keswick. Area, 1,520 sq. m.; pop. 262,900. (2) City, W. Maryland, U.S.A., on Potomac R.; bituminous coal; iron, steel works; important rly. jn. Pop. 38,000. (3) Tn., Rhode Island, U.S.A., on N.E. border of Massachusetts; coal mines; cotton manufactures. Pop. 10,300.

Cum'brae, THE, two islands, Firth of Clyde, Scotland, between island of Bute and Ayrshire; form parish of co. of Bute. Great Cumbræ has circumference of 10½ m.; only town, Miliport, summer resort. Little Cumbræ has area about 1 sq. m.; light-house. Pop. (par.) 5,900.

Cum'nock. (1) New, par. and vil., Ayrshire, Scotland, 4½ m. S.E. of Old Cumnock; coal mining; limestone and potter's clay. Pop. (par.) 6,400. (2) Old, par. and mkt. tn., 14 m. E. of Ayr; coal mining and

agricultural machinery. Pop. (par.) 5,600.

Cundinamarca (*koon-dō-na-mār'ka*), dep., Colombia, S. America, lying between Rs. Orinoco and Magdalena; w. traversed by Andes (highest point, 15,780 ft.); llanos in e. feed large number of cattle; coffee, sugar, cocoa, tobacco; salt, copper, coal mines. Cap. Bogota. Area, 8,046 sq. m.; pop. 812,000.

Cuneo (*koo'nā-ō*). (1) Prov., N. Italy; bounded w. and s. by Cottian and Maritime Alps; cattle breeding; cereals, fruit, silk, marble, iron; mineral springs. Area, 2,870 sq. m.; pop. 624,000. (2) Tn. and episc. see, cap. of above, 65 m. w. of Genoa; cathedral (restored); 12th cent. church; silk, cotton, paper manufactures. Pop. 31,000.

Cupar (*koo'p'er*), or CUPAR-FIFE, co. tn., royal burgh, Fife, Scotland; agricultural centre, large trade in grain; beet-sugar factory; flax spinning and malting. Interesting historical buildings in dist. Pop. 4,600.

Curaçao, or CURAÇOA (*koo-rā-sā'ō* or *koo-rā-sō'ā*), isl., Dutch W. Indies, in Caribbean Sea, off N. coast of Venezuela; surrounded by coral reefs; oil refining; salt, phosphates, and cattle exported. Chief tn., Willemstad. Area, 210 sq. m.; pop. 41,000.

Cuzco (*koo-ri-kō*). (1) Prov., Chile; copper, gold mines; very fertile; produces cereals, fruit, wine; cattle grazing. Area, 3,045 sq. m.; pop. 108,000. (2) Tn., cap. of above, 116 m. s. of Santiago. Pop. 16,000.

Curityba (*koo-rē-tē'bā*), tn., cap. of Paraná, Brazil, 225 m. s.w. of S. Paulo; prepares yerba maté tea; match factories; porcelain works. Alt. c. 3,000 ft. Pop. 37,000.

Curragh (*kur'nach*), common, Kildare, I.F.S., 26 m. s.w. of Dublin; famous racecourse; was training centre for troops during Great War.

Cursola (*koor-dō'sā*). (1) Isl., Adriatic Sea, Yugoslavia; mountainous, well-wooded, produces much fruit; has limestone quarries. Area, 100 sq. m.; pop. 28,000. (2) Seapt., cap. of

above; fortified; cathedral, and Franciscan monastery (15th cent.); boat building. Pop. 7,000.

Cutch, Indian state, Western India States Agency, India, forming peninsula in n.w. Bombay; is largely barren, rocky; wheat, barley, cotton in fertile tracts; embroidery, silver-work; frequent earthquakes; governed by Indian ruler under British protection. Chief tn., Bhuji. Area, 7,616 sq. m.; pop. 484,500. N. and E. lies the Runn of Cutch, which is flooded half the year, and converts Cutch into an island. When not flooded, the Runn is mostly a desert covered with a deposit of salt.

Cut'ack, city, cap. of Cuttack dist., s.e. Bihar and Orissa, India, at apex to delta of Mahanadi; situation gives it military and commercial importance; famous for gold and silver filigree work; produces rice. Pop. 51,000. Area of dist., 3,654 sq. m.; pop. 2,064,700.

Cuxhaven (*kooks-hä'f'en*), seapt. tn., Hamburg, Germany, on w. side of mouth of Elbe. Great harbour works were constructed (1891-96) capable of berthing largest ocean steamers, and Cuxhaven became the port of the Hamburg-America line. Cuxhaven is a free port, has a fishing industry, imports coal, brick, and timber. Pop. 17,600.

Cuyaba (*koo-yā'ba*), tn., cap. of Matto Grosso, Brazil, S. America, on Cuyaba R., trib. of R. Paraguay; cathedral; arsenal; seat of bishopric, and important military centre. Pop. 14,300.

Cuzco (*koo'skō*). (1) Dep., s. Peru, largely mountainous; agriculture, stock breeding, and, to a lesser degree, mining, though the district is rich in minerals. Area, 55,716 sq. m.; pop. c. 700,000. (2) City, Peru, cap. of above, in valley of Andes, 360 m. s.e. of Lima; founded by Manco Capac (11th cent.); anc. cap. of the Incas; site of famous Temple of the Sun; has remains of gigantic fortress and other Inca architecture; taken by Pizarro (1533); bishop's see; cathe-

dral, univ.; manufactures cotton and woollen goods, gold and silver articles. Pop. c. 37,000.

Cyclades (*sik'la-dēs*), group of Greek islands in Ægean Sea; of volcanic origin; generally mountainous; mostly fertile; among principal are Syra, Andros, Paros, Delos, Melos, Tinos, Myconos, Naxos, Thera, Ceos; export emery, iron ore, wine, tobacco. Area, c. 1,042 sq. m.; pop. 129,700.

Cyprus (*sī'prus*), third largest isl. in Mediterranean; a British Crown Colony; 60 m. w. of Syria, 44 m. s. of Asia Minor; length, 140 m.; breadth, 30 to 60 m. In n. are two ranges of mts., and one in s., with Mt. Troödos (6,406 ft.). In the centre is a low-lying fertile plain. Rivers are generally dry channels; torrents after heavy rains (Nov.-May) and snow melting. Irrigation is effected by wells and a canal. Climate is good, except in hot season, when fever is prevalent in low-lying regions. Forests formerly yielded much material for shipbuilding, but have almost entirely vanished; climate and soil have suffered accordingly. Cyprus was famed of old for copper, which derived its name from this island, and copper is still mined. Salt is mined and procured by evaporation. Most important products are wheat, barley, locust beans, cotton, silk, flax, tobacco, wool, gypsum, fruits, sponges, and large quantities of wine. Splendid mules are bred. The principal towns are Nicosia (cap.), Larnaca, Limassol, Famagusta. Area, 3,584 sq. m.; pop. 311,000.

Cyrenaica (*sir-en-ā'ikā*), dist., Italian Libya, n. Africa, between Tripolitania and Egypt; mainly desert; chief oasis, Kufra; cattle, sheep, and camels raised; barley; coastal fisheries (sponges, tunny); salt pans; settlement possible on coast; rly. mileage, 100. Cap. Benghazi. Area, c. 285,000; pop. c. 200,000.

Cythera (*sith'er-a*), (modern *Cerigo*), most southerly of Ionian Islands, s. of Laconia, Greece; in anc. times had magnificent temple to Aphrodite; surface mostly rocky and mountainous; produces wheat, grapes, olives, cotton; sheep and goat rearing; cap. Capsali.

Czechoslovakia (*chek'o-slō-vāk'i-a*), inland republic, central Europe; comprises Bohemia, Moravia, part of Silesia, Slovakia, and Ruthenia; frontiers are Bohemian Forest in s.w., Erzgebirge in n.w., Riesengebirge, Sudetes Mts., and Carpathians in n., R. Danube in s.; surface mountainous with fertile valleys; drained by Elbe and tribs., and March; climate generally continental; industries include agriculture, mining (especially coal), lumbering, brewing and distilling, sugar refining, calicoes, woollens, chemicals, porcelain, glass; chief crops, wheat, rye, barley, oats, potatoes, sugar beet, maize. Cap. is Prague. Area, 54,207 sq. m.; pop. 13,613,200.

Czernowitz. See CERNAUTI.

Czestochowa (*chans-tō-kō'va*), tn., Poland, c. 120 m. s.w. of Warsaw; place of pilgrimage; manufactures cotton yarns, cloth, and paper. Pop. 80,600.

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Dabrowa Gornicza (*dōn-brō'va gur-nē'cha*), tn., Poland, 38 m. n.w. of Cracow, on coalfield adjoining Prussian Silesia. Pop. 42,000.

Dacca. (1) Dist., Bengal, India, an alluvial plain intersected by rivs. and canals; jute and rice. Area,

2,723 sq. m.; pop. 3,126,000. (2) Chief tn. of above, 150 m. n.e. of Calcutta; second city of Bengal; great jute centre; fine muslin; gold and silver utensils, filigree, carving of shells; univ. Pop. 120,000.

Dagenham, par. and vil., Essex,

England, 3 m. E. of Barking; motor works; bricks and tiles. Pop. 89,400.

Daghestan (*dā-ge-stān*), republic, Russia, on w. shore of Caspian Sea; mountainous; rivs. Sulak, Samur, and Terek (to the Caspian); extreme climate; people mainly Lesghians, Tatars, and Georgians; cattle and sheep; cotton, tobacco, fruit, silk-worms; copper, salt, sulphur. Cap. Makhach-Kala. Area, 22,000 sq. m.; pop. 788,000.

Dag's. See **HIMUMAA**.

Dagupan, tn., Luzon, Philippines, on Lingayen Bay; makes wooden shoes; exp. salt. Pop. 22,500.

Dahomey, French colony, Guinea coast, W. Africa; Nigeria on E., Togoland on W.; moist, hot; palm kernels and palm oil. Chief tn., Porto Novo; chief port, Kotonu, from which rly. to R. Niger. Area, 41,000 sq. m.; pop. c. 1,000,000 Negroes.

Dairen (*dā'ren*), port, Liaotung pen., Manchuria, on land leased to Japan; fishing; salt; exports soya beans. Pop. 300,000.

Dakar, cap. of French W. Africa; port in Senegal; most westerly port of Africa; naval station; submarine cable to Brest; outlet for Senegal and adjoining region. Pop. 34,000.

Dakota, N. and S. See **NORTH DAKOTA** and **SOUTH DAKOTA**.

Dalbhatie, tn., Kirkcudbrightshire, Scotland; granite quarries and polishing works. Pop. 3,000.

Dalecarlia (*dā-lē-kar'li-a*), former prov., central Sweden, drained by R. Dal; iron ore.

Dalketh, mkt. tn., Midlothian, Scotland, at junction of N. and S. Esk; brush factories, brass works. Pop. 7,500.

Dalkey, wat.-pl., on Irish Sea, co. Dublin, I.F.S. Pop. 4,150.

Dallas, city, E. Texas, U.S.A.; important rly. centre in rich cotton, corn, wheat, alfalfa, and fruit dist.; oil fields; lumber, meat-packing, cotton, cotton-seed oil, and other industries. Pop. 260,000.

Dalmatia, coast dist., Yugoslavia; narrow, mountainous country with

numerous islands on N.E. coast of Adriatic Sea; breadth, 2-40 m.; mountain ranges include w. chains of Dinaric Alps and Karst plateaus; indented coast. Climate sub-tropical. Mostly pasture-land and woods, producing timber, wine, olive oil; shipbuilding in some islands; iron, lignite, asphalt, and salt; maize, rye, barley, fruits; makes Maraschino liqueur; famous lace school in Split. Inhabitants are mostly Serbo-Croats and Italians. Chief ports, Kotor and Split. Area, 4,916 sq. m.; pop. 622,000.

Dalmelington, vil., Ayrshire, Scotland, on R. Doon; ironworks and collieries. Pop. 3,500.

Dalmeny, par. and vil., W. Lothian, Scotland; station for Forth Bridge; oilworks. Pop. (par.) 5,000.

Dalry. (1) Tn., Ayrshire, Scotland, 6 m. N.E. of Ardrossan; manufactures tweed and hosiery; coal and iron mines in vicinity; limestone. Pop. 4,800. (2) Par. and vil., Kirkcudbrightshire, 16 m. N.W. of Castle Douglas; holiday resort. Pop. (vil.) 540.

Dalton, city, N.W. Georgia, U.S.A., in iron and manganese dist.; lumber, textiles, canned goods. Pop. 8,000.

Dalton-in-Furness, mkt. tn., Lancs, England; Furness Abbey 1½ m. distant; iron ore and limestone. Pop. 10,300.

Daman, or **DAMAUN**, Portuguese port, Gulf of Cambay, Bombay, India; teak forests; cotton weaving; salt; fisheries. Area, 150 sq. m.; pop. 49,000.

Damanhur, tn., Egypt, 38 m. E.S.E. of Alexandria; commercial centre; cotton factories. Pop. 48,000.

Damaraland, central prov., Terr. of S.W. Africa; extends from Atlantic Ocean inland to Kalahari Desert; mountainous; copper; stock raising; contains Windhoek, cap. of Terr., and port of Walvis Bay.

Damascus, city, cap. of Syria; situated on R. Barada, surrounded by orchards at base of Anti-Lebanon Mts.; probably the oldest city in the world still inhabited; streets are

narrow, and houses ruinous; great caravan and railway centre; manufactures embroidered goods, inlaid and metal work, jewellery; chief imports, woollens, raw cottons, silks, tobacco, sugar, petroleum, and leather. Pop. 170,000.

Damiet'ta, riv. port, Lower Egypt, on E. distributary of Nile; cottons; pottery; gave name to dimity; eclipsed by Port Said. Pop. 35,000.

Dan'o, tn., Cebu I., Philippines; rice, sugar, copra, cocoa; coal mines in vicinity. Pop. 23,000.

Dan'bury, city, Connecticut, U.S.A., 60 m. N.E. of New York; manufactures hats, paper, silk, and silverware. Pop. 22,000.

Dannemo'ra, ironfield, Sweden, 25 m. N. by E. of Uppsala; ore needs no reducing agents; worked since 1579.

Dan'ube (German *Donau*), second largest riv. of Europe and chief highway of commerce for central Europe, drains c. 320,000 sq. m.; total length, 1,725 m.; rises in Black Forest; course generally eastwards; flows through Germany, Austria; between Czechoslovakia and Hungary; through Hungary, Yugoslavia; between Romania and Bulgaria, and through Romania into Black Sea through vast delta; has innumerable tribs., including Lech, Isar, Inn, Morava (March), Drava, Tisa, Sava, Morava, Seret, Prut. Chief tns. on banks are Vienna, Bratislava, Budapest, Belgrade. Danube is navigable from Ulm to Black Sea, and is open to all nations; shipping enters at Sulina mouth (greatly improved by European Commission of the Danube, instituted 1856); famous Iron Gates rapids long hindered navigation. Danube is connected with Rhine by Ludwigs Canal (1844) in process of great enlargement, since 1921, with Elbe by Vltava (Moldau) and Mühl canals.

Danville. (1) City, Virginia, U.S.A., on border of N. Carolina; cotton and tobacco factories. Pop. 22,000.

(2) City, Illinois, U.S.A., 120 m. S. of Chicago; centre of coal mining;

riy. carriages, lumber, textiles, flour, bricks, and glass. Pop. 37,000.

Danzig (*dant'sch*), Free City with port, fortress, and naval station, 3 m. from Baltic, W. of E. Prussia. Mottlau, trib. of R. Vistula, flows in two branches through the town; trade more than doubled between 1884 and 1909, due to deepening of river and creation of free port at Neufahrwasser; shipbuilding; sugar refining; distilling, brewing, liqueurs; iron and machine works, ordnance factories; tobacco, cigars, bricks, and cutting of amber. Imports coal, chemical products, herrings, petroleum, iron, and earthenware. Exports wood, sugar, grain, flour, molasses, and oil-cake. Peace Conference of Paris in 1919 decided that Danzig should be a free city under the League of Nations. It is a member of the Polish customs administration. Area, 754 sq. m.; pop. 390,000; of city proper, 230,000.

Darbhanga', tn., Bihar and Orissa, India, 60 m. N.E. of Patna; group of villages round maharajah's palace; large bazaars; rice, oil-seeds, food grains, sugar, saltpetre, and tobacco. Pop. 54,000.

Dardanelles' (-els') (anc. *Hellespont*), long, narrow strait connecting Aegean Sea with Sea of Marmara; length, 45 m.; width varies from 5 m. to less than 1 m.; on N.W. is peninsula of Gallipoli, on S.E. Asia Minor; entrance from Aegean Sea 2 m. wide; from this point Asiatic shore curves in crescent shape, while European shore is almost straight, to the 'Narrows' between Chanak (Asiatic side) and Kilit Bahr (European shore); navigation is dangerous; vast strategic importance; fortified since 1460; opened to Russian merchantmen in 1774; demilitarized since Great War.

Dar-es-Salaam' ('harbour of peace'), port and cap., Tanganyika Territory, Africa, 50 m. S. of Zanzibar; starting-point of Central Rly. through Tabora to Kigoma; overland telegraph via Ujiji with S. Africa; submarine

cable with Zanzibar; handles half of trade of Terr. Pop. 25,000.

Darfield, urb. dist., W. Riding, Yorks, England, 5 m. E.S.E. of Barnsley; coal mining; noted church. Pop. 5,300.

Darfur, w. prov., Anglo-Egyptian Sudan, Africa; administered by its hereditary sultan; a sandy steppe-like plateau; fertile valleys; gum arabic, wheat, millet, cotton, sesame, and tobacco; cattle raising most important. Cap. El Fasher. Pop. 1,000,000.

Dar'gai, hill station, N.W. Frontier Province, India; terminus station of Malakand Rly.

Darial', gorge, in Caucasus, E. of Mt. Kasbek, on Georgian military road; chief pass across Caucasus from early times; traversed by the river Terek; alt. c. 5,000 ft.

Darien. See PANAMA.

Darjee'ling, tn., dist. of same name, Bengal, India, 300 m. N. of Calcutta, on Himalayas; alt. 7,200 ft.; hot weather residence of Bengal govt.; mountain scenery unrivalled, including Kinchinjunga and Everest; tea. Pop. 23,000.

Dar'laston, part of parl. bor. of Wednesbury, s. Staffs, England, 9 m. from Birmingham; coal and ironstone; blast furnaces, steel works, and hardware (nuts and bolts). Pop. 19,700.

Dar'ley, NORTH, urb. dist., N. Derbyshire, England, 2½ m. N.W. of Matlock; holiday resort; lead mining. Pop. 4,100.

Dar'ling, riv., E. Australia; flows from Dividing Range between Queensland and New South Wales to join R. Murray at Wentworth on borders of Victoria; length, 1,160 m.; variable in volume according to season; in good season navigable to Bourke.

Darling Downs, tableland, S.E. Queensland; excellent grazing country; tin and silver. Chief tn., Toowoomba. Area, 25,000 sq. m.

Darling Range, scarped mts., E. of Perth, W. Australia; 400 m. long; greatest alt. 1,500 ft.

Dar'lington, parl. and munic. bor., s. Durham, England; rapid growth began in 1825 with opening of Stockton and Darlington Rly.; engine factories; worsted spinning; iron and brass foundries. Pop. 72,100.

Darm'stadt, cap. of Hesse-Darmstadt, Germany, 17 m. S. of Frankfurt-on-Main; old and new tns. enclosed by walls; centre of applied art; iron foundries and boiler factories, machine shops, and chemical works. Pop. 90,000.

Dart, riv., rising in Dartmoor, Devon, England; flows 36 m. to English Channel at Dartmouth; summer steamers; fine scenery.

Dart'ford, mkt. tn., on R. Darent, Kent, England; lies between Woolwich and Gravesend; powder and paper mills; engineering, chemical, and cement works. Pop. 28,900.

Dart'moor, plateau, S.W. Devon, England; average alt. 1,500 ft.; numerous granite hills (tors) fantastically weathered; highest points, High Willhays (2,039 ft.), Yes Tor (2,028 ft.); streams form deep picturesque valleys (cleaves); fine scenery on Dart, Bovey, Teign, Taw, Oke-ment, and Tavy; convict prison at Princetown; c. 22 m. long (N. to S.) by c. 20 m. broad (E. to W.).

Dart'mouth. (1) Munic. bor. and port, s. Devonshire, England, on W. side of Dart estuary, opposite Kingswear; Royal Naval College on a hill above the town; yachting centre. Pop. 6,700. (2) Tn., Nova Scotia, Canada, on Halifax Harbour opposite Halifax; foundries, tanneries, oilworks, rope walks, and sugar refineries. Pop. 8,000.

Dart'on, urb. dist., W. Riding, Yorks, England, 3 m. N.W. of Barnsley; coal mining; nail making. Pop. 12,600.

Daru (*da'roo*), port, Papua, Brit. New Guinea, on isl. at W. of entrance to Fly R.; recruiting centre for Torres Strait pearl-shell fishery.

Dar'vel, burgh, Ayrshire, Scotland, 9 m. E. of Kilmarnock; curtains, carpets, lace, broadin. Pop. 3,200.

Dar'wen, tn., Lancs, England, 3 m. s.s.e. of Blackburn; cotton and paper mills, blast furnaces, iron and brass foundries, paper-staining and glazed-brick works; flagstone quarries. Pop. 36,000.

Dar'win, formerly PALMERSTON, cap., Terr. of N. Australia, on Port Darwin, s. of Melville I.; mail station; rly. to interior; overland telegraph to Adelaide; pearl-shell and other fisheries, cattle. Pop. c. 1,000.

Dar'chet, residential tn., Bucks, England, on R. Thames, 2 m. E. of Windsor; angling. Pop. 2,400.

Dau'gavpils, or DVINSK, tn., Latvia, on S. Dvina R., 115 m. s.e. of Riga; rly. jn.; military centre; timber industries. Pop. 41,000.

Dauphiné (*dô-fê-nâ'*), former prov., France; between Alps (E.), Rhone (W. and N.), and Provence (S.); cap. Grenoble.

Dav'ensport, city, Iowa, U.S.A., on Mississippi R.; leading commercial city of state; agricultural implements. Pop. 61,000.

Dav'entry (or *dân'tri*), munic. bor. and mkt. tn., Northants, England, 12 m. W. of Northampton; high-power wireless station; boot and shoe industry. Pop. 3,600.

Da'vis Strait, between Greenland and Baffin Land; connects the Atlantic with Baffin Bay; minimum breadth 200 m.; whale-fishing industry, now declined.

Dav'os, two vils. (Platz and Dörfli), Swiss canton of Grisons, 15 m. E. of Chur; alt. 5,100 ft.; well adapted for consumptive patients. Pop. 10,000.

Daw'ley, urb. dist., Salop, England, 4 m. s.e. of Wellington; coal and iron. Pop. 7,400.

Daw'lish, urb. dist. and seaside resort, s. Devonshire, England; sheltered situation. Pop. 4,600.

Daw'son, mining town, Yukon, Canada, at junction of Klondike R. with Yukon R.; founded (1896) after the gold rush; metal works and saw-mills. Pop. c. 1,000.

Dax, tn., Landes, s.w. France, on R. Adour; hot sulphur springs; mud

baths; resins, wool, wood, and honey; asphalt, rock salt, and iron ore. Pop. 10,000.

Daylesford (*dâls'ford*), tn., Victoria, Australia, 55 m. n.w. of Melbourne; gold mining, alluvial and quartz; wheat. Pop. 5,000.

Day'ton, city, Ohio, U.S.A., 45 m. N.N.E. of Cincinnati; electrical machinery; aeroplanes; contains works of the National Cash Register Co. Pop. 200,000.

Dayto'na Beach, city, E. Florida, U.S.A.; winter resort; racing course for motor vehicles on beach. Pop. 10,000.

D.C., contraction for District of Columbia. See WASHINGTON (2).

De Aar, tn., Cape of Good Hope prov., Union of S. Africa, 500 m. N.E. of Cape Town; important rly. jn.; alt. 4,079 ft. Pop. 5,000.

Dead Sea, lake, s. Palestine, occupying a depression 47 m. long by 9½ m. wide, into which R. Jordan flows, lowest and largest of three lakes in rift-valley of Jordan, and fed by that river; has no outlet; mean level 1,292 ft. below level of Mediterranean (lowest level of any known water); greatest depth (N. end), 1,310 ft.; water contains c. 25 per cent. of salt (five times that of the ocean); water has unusual buoyancy; human body floats on surface; poisonous to animal life; bitumen floats on the water.

Deal, port and munic. bor., Kent, England; between coast and Goodwin Sands are the Downs; Walmer Castle, residence of the Warden of the Cinque ports; Walmer (continuous with Deal on the s.) contains extensive barracks and a naval and military hospital. Pop. 13,700.

Dean, FOREST OF, hilly dist. between Severn and Wye, W. Gloucestershire, England; coal and iron mines; stone quarries; 20 m. long, 10 m. broad.

Dear'born, tn., Michigan, U.S.A., 10 m. W. of Detroit, on R. Rouge, residential suburb of Detroit. Pop. 50,000.

Deauville (*dô-vêl*), fashionable wat.-pl., on English Channel, France,

10 m. s. of Havre; racecourse; international regatta. Pop. 5,000.

De'bar, tn., Yugoslavia, near point where Black Drin riv. enters Albania; cattle; maize, tobacco. Pop. 7,500.

Debrecen (*déb'et-sen*), tn., Hungary, 143 m. E. by rail of Budapest; rly. jn.; noted Protestant theological centre; univ.; large annual fairs; cattle; grain. Pop. 108,000.

Deca'tur. (1) City, Illinois, U.S.A., 38 m. E. of Springfield; iron-foundry products; railway workshops; coal, live-stock, and agricultural produce. Pop. 58,000. (2) City, N. Alabama, U.S.A., 75 m. N. of Birmingham; steel works, lumber mills; cotton and silk industries. Pop. 15,000.

Decazeville (*dé-háiz-vèl*), tn., Aveyron, s. France, 21 m. N.W. of Rodez; coal and iron. Pop. 12,000.

Dee'can, name applied to the whole peninsula of India S. of Vindhya Mts., between Bay of Bengal on E. and Arabian Sea on W.; sometimes limited to that portion of the tableland lying between rivs. Nerbada and Kistna.

Decin (*dye'chèn*), formerly TETSCHEN, tn., Czechoslovakia, on r. bk. of R. Elbe, 50 m. N. of Prague; riv. port; chemicals, paper, textiles. Pop. 12,000.

Dede-Agatch (*dā-dā-ā-gāitch'*), officially known as ALEXANDROUPOLIS, port, w. Thrace, Greece, on Gulf of Enos; serves Bulgaria and Adrianople; exports grain, timber. Pop. 13,000.

Dee. (1) Riv. of England and Wales, flows into and from Bala Lake, Merionethshire; traverses vale of Llangollen; nearly encircles city of Chester; thereafter canalized for 7 m.; estuary greatly impeded by sandbanks; length, 80 m. (2) Riv., Aberdeenshire and Kincardineshire, Scotland; one of the finest salmon rivers in Britain; rises in Cairngorm Mts. and enters North Sea at Aberdeen, passing Braemar, Balmoral Castle, and Ballater; supplies Aberdeen with water. (3) Riv., Kirkcudbrightshire, Scotland; issues from

Loch Dee and flows to Solway Firth; good salmon river.

Dehra (*dā-rā*), chief tn., Dehra Dun dist., United Provinces, India, 75 m. E. of Ambala; contains the Indian Forest School and Military College. Pop. 38,000.

Dehra Dun, dist., United Provinces, India; dun or valley between Siwalik Hills on S. and Himalayas on N., extending from Jumna valley on W. to Ganges valley on E.; fertile and well wooded, with many tea gardens. Chief tn., Dehra. Area, 1,193 sq. m.; pop. 215,000.

Deir ez-Zor (*dār ez-zôr*), tn., cap. of Zor Sanjak, Syria, on r. bk. of Euphrates, crossed here by modern stone bridge; on motor route between Damascus and Baghdad. Pop. c. 10,000.

Dej (*dezh*), tn., N.W. Romania, on R. Someşul (Szamos); vines; salt mines near; linen weaving. Pop. 11,500.

Delago'a Bay, inlet of Indian Ocean, Mozambique, E. Africa; receives Tembe, Umbelusi, and Usutu rivs.; S. part, sheltered by Inyak peninsula and isl., forms harbour of Port Melville; principal port, Lourenço Marques; rlys. from port to Transvaal and Swaziland; was first port of call by Portuguese ships on return from Goa, hence its name.

Del'atyn, tn., s. Poland, on R. Prut, 65 m. W.N.W. of Cernauti (Czernowitz); medicinal springs and baths. Pop. 49,000.

Delaware. (1) Atlantic state, U.S.A., situated on peninsula formed by Chesapeake Bay and Delaware R.; bounded N. by Pennsylvania, W. and S. by Maryland, E. by Delaware R. and bay; shores sandy and marshy, with many creeks and bays; some parts reclaimed from sea by dykes. The N. beautiful, fertile dist., with rolling hills and deep valleys. The S. is almost flat, and some parts swampy. Rivs., small but navigable, include Brandywine; canal connects Delaware R. with Chesapeake Bay; principal harbours, Wilmington, Newcastle, and Lewes. State is chiefly agricul-

tural; fruits (especially peaches and strawberries) and grain; market gardening, dairy farming, stock raising, and oyster fishing carried on; forests supply fine timber; manufactures include iron and steel products, ships, leather goods, cottons, flour, and paper. Cap. Dover. Area, 2,370 sq. m., of which 405 sq. m. water; pop. 223,000. (2) City, Ohio, U.S.A., 23 m. N. of Columbus; railway workshops; iron foundries; mineral springs. Pop. 9,000.

Delaware River, E. U.S.A., 410 m. long; rises in Catskill Mts. and flows into Delaware Bay. Chief tn. on its banks, Philadelphia.

Delft, tn., S. Holland, Holland, 5 m. S.E. of The Hague; in 17th and 18th centuries famous for falence pottery—'Delft ware'; now 'New Delft' is made; chemicals; tobacco. Pop. 49,500.

Delfts' haven, or **DELFTSHAVEN**, S.W. suburb of Rotterdam (q.v.).

Delhi (*del'i*), cap. of Brit. India; imperial enclave (557 sq. m.), Meerut dist., United Provinces, India, on r. bk. of Jumna; surrounded by wall 5½ m. in circumference. 'The Ridge' with its monuments and the battered Kashmir gate recall incidents in Indian Mutiny. At Delhi Durbar (Dec. 1911) King-Emperor George V. laid foundation stone of new cap.; new government buildings are already established; bazaars famous for shawls, precious stones, gold and silver ware; important centre of wheat trade; has many cotton mills. Pop. 305,000.

Delitzsch (*de-léck'*), tn., Prussian Saxony, Germany, 16 m. E. of Halle; tobacco, cigars, hosiery, and beer; market gardening; coal mines in dist. Pop. 15,000.

Del'menhorst, tn., Oldenburg, Germany, 8 m. W. of Bremen; jute spinning, linoleum, woollens. Pop. 24,500.

Delphi (*del'fi*), small tn., Greece, near Gulf of Corinth; famous for oracle of Apollo, in charge of Pythian priestess; situated on steep slope on

s. side of Mt. Parnassus; shut in on s. by mts.; important excavations by Fr. archaeologists since 1891.

Demavend', peak, Elburz Mts., Persia, c. 60 m. N.E. of Tehran; extinct volcano; alt. 17,930 ft.; sulphur and pumice.

Dembe'a, prov., Amhara, Abyssinia, along N. shore of L. Tana; filigree silver and leather work; oxen reared. For L. Dembea, see TANA.

Demerá'ra. (1) Co. of Brit. Guiana, S. America, between Essequibo and Demerara rivs.; exports sugar, molasses, rum, and timber. Pop. c. 170,000. (2) Riv., Brit. Guiana, rising in Maccari Mts. and flowing to Atlantic; length, 170 m.

Demmin (*dem-én'*), tn., Pomerania, Prussia, 72 m. N.W. of Stettin; iron foundries; textiles; probably oldest tn. in Pomerania. Pop. 13,000.

Denain (*dè-nan'*), mining tn., Nord, France, 8 m. S.W. of Valenciennes; coal mines; ironworks; glass. Pop. 24,500.

Denbigh (*den'bi*), munic. bor., co. tn., Denbighshire, N. Wales; timber, shoes; slate, flagstone, and lime quarries. Pop. 7,200.

Denbighshire, maritime co., Wales; Irish Sea on N., R. Conway forming W. and Dee part of E. boundary; surface partly mountainous, divided into several fertile valleys; greater part of lower ground produces oats, barley, turnips; uplands form pasture; dairy produce; coal, lead, slate, limestone, and freestone; collieries and extensive ironworks; woollen manufactures; co. tn., Denbigh; other tns., Wrexham, Ruthin. Area, 665 sq. m.; pop. 157,600.

Denia (*dà-né'á*), tn. and port, Alicante, Spain, on Mediterranean; Moorish remains; woollen and linen; exports fruit and vegetables; fishing. Pop. 13,000.

Denil'iquin, tn., Riverina, New South Wales, Australia, near border of Victoria; distributing centre for surrounding sheep stations. Pop. 3,000.

Den'ison, city, Texas, U.S.A., 70 m.

N. by E. of Dallas, near Red R.; cotton, flour, and lumber mills. Pop. 14,000.

Denizli, tn., Smyrna vilayet, Asia Minor, Turkey, 80 m. E. of Aidin; leather curing and cotton manufactures. Pop. 35,000.

Denmark, kingdom, N. Europe; partly mainland, partly archipelago; mainland part, Jutland, is N. part of the long peninsula extending N. of Germany, between North and Baltic seas; divided from Norway by Skagerrak, from Sweden by Kattegat and Sound. The larger islands are Zealand and Funen, the smaller Langeland, Laaland, Falster, Møen, and, 90 m. to the E., Bornholm. The surface is generally low, and in places is protected by dykes; many lakes. The climate is temperate and damp; about half of the country is in pasture, most of the remaining available land being arable; chief crops, oats, barley, potatoes, wheat, rye, sugar beet; beech flourishes better than anywhere else in Europe; large fisheries. Industries include distilling, brewing, sugar refining, and margarine making; principal exports are butter, eggs, pork, bacon, besides sheep, hides, wool, cereals, fish, margarine. The enormous amount of dairy produce is obtained largely by co-operation and scientific methods of manufacture. Imports include coal, manufactured goods, and raw products. On shallow W. coast is rapidly-growing port of Esbjerg; the more important ports are on the E.; there are 3,219 m. of rly. (largely owned by the state) connected by steamboats or in winter by iceboats.

The Faroes are an integral part of Denmark, whose only colonial possession is Greenland.

Chief tns. are Copenhagen (cap.), Aarhus, Odense, Aalborg. Area, 16,568 sq. m.; pop. 3,435,000.

Den'ny, tn., Stirlingshire, Scotland, 12 m. S. of Stirling; coal, ironstone, chemicals, paper. Pop. (with Dunipace) 5,500.

Dent Blanche (*don blansh*), mt.

peak, Valais, Switzerland, in Pennine Alps; alt. 13,415 ft.

Dent du Midi (*dōn du mē-dē*), a summit of Swiss Alps, in Rhone valley, near French frontier; alt. 10,700 ft.

Dent'on, tn., Lancs, England, 5 m. S.E. of Manchester; felt and silk hats; coal mines and ironworks in vicinity. Pop. 17,400.

D'Entrecasteaux Islands. See under NEW GUINEA.

Den'ver, cap., Colorado, U.S.A., on S. Platte R.; alt. 5,200 ft.; centre of important mining area and of ranching and irrigated agricultural dist.; cattle and sheep stockyards; lead, copper, iron, gold, and silver smelting. Pop. 288,000.

Deptford (*dē't'ford*), metropolitan and parl. bor., Greater London, 4 m. E. of St. Paul's; royal dockyard founded by Henry VIII. was filled up, and became in 1871 a foreign cattle market; Peter the Great worked in dockyard; Royal Naval Victualling Yard; timber trade; engineering. Pop. 106,900.

Dera Ghazi Khan (*dā'rā ghā-zī kān*), cap. of dist. of same name, Punjab, India, near r. bk. of Indus; silk, brass vessels, and ivory bangles; grain, cotton, and indigo exported. Area of dist., 5,300 sq. m.; pop. (tn.) 25,000, (dist.) 470,000.

Dera Ismail Khan (*dā'rā īs-mā-īl kān*), cap. of dist. of same name, at S. extremity of N.W. Frontier Prov., India, on R. Indus; inlaid woodwork. Area of dist., 3,403 sq. m.; pop. (tn.) 40,000, (dist.) 261,000.

Derbent, or DERBEND, tn., Dagestan, U.S.S.R., on W. coast of Caspian Sea; textile factories; exports madder, fruit, silk, and cotton. Pop. 25,000.

Derby (*dā'r'bi*), co. tn., Derbyshire, England; important rly. centre; L.M.S. rly. works; first successful silk mill in kingdom (1717); china manufacture began in 1750; modern industries, chenille, cotton, and lace goods, elastic web, 'Crown Derby' china, and articles in fluor-spar and marble; motor-cars. Pop. 142,400.

Der'byshire, co., England; bounded N. by Yorks, E. by Notts, S. by Leicestershire and Staffs, W. by Staffs and Cheshire. In N. is grand and rugged scenery of the Peak dist., where Pennine Range culminates in the Peak; sheep farming is practised; wide moorlands in N.W.; E. surface is gently undulating, and S. mostly flat, with good crops of wheat and barley, and large dairy farms. Co. abounds in picturesque scenery; valleys of Derwent and Wye especially beautiful; many caves in limestone region; other rvs. are Trent, Dove, and Dane. Co. yields limestone, lead, zinc, and has important collieries, chiefly in E. Manufactures include silk, cotton, elastic web, porcelain, and lace. Chief tns. are Derby (cap.), Chesterfield, Glossop, Ilkeston, Ashbourne; Matlock, Buxton, and Bakewell are inland wat.-places. Area, 1,030 sq. m.; pop. 757,300.

Dereham (*dêr'hâm*), mkt. tn., Norfolk, England, 15 m. W.N.W. of Norwich; agricultural implements. Pop. 5,700.

Derg. (1) Lough, Tipperary, Galway, and Clare, I.F.S.; an expansion of R. Shannon; length, 24 m.; average width, 2 m.; beautiful islands. (2) Lough, S. Donegal, I.F.S.; 3 m. by $2\frac{1}{2}$ m.; studded with islands and rocks; resort of pilgrims since Middle Ages.

Derna', port, Cyrenaica, Italian Libya, N. Africa; only tn. of importance between Alexandria and Benghazi; open roadstead; trades in fruit, hides, and wool; caravan trade. Pop. c. 10,000.

Der'went. (1) Riv. of Cumberland, England, drains Derwentwater and Bassenthwaite, and enters Irish Sea at Workington; length, 38 m. (2) Riv. of Yorks, England; rises in Yorkshire Wolds; joins Ouse at Barnby-on-the-Marsh; navigable as far as Malton; length, 70 m. (3) Riv. of Derbyshire, England, rises N. of the Peak, and flows past Buxton, Belper, and Derby to R. Trent; it and its trib. the Wye are famed for their

beauty; length, 60 m. (4) Riv., Tasmania; issues from Lake St. Clair and flows into Storm Bay, forming the estuary on which Hobart stands; length, 130 m.

Der'wentwater, lake, Cumberland, England; an oval expansion of the Derwent at N. end of Borrowdale; considered by many the most beautiful of Eng. lakes; area, 2 sq. m.; several small islands; 'floating island' of decayed vegetation appears at intervals.

Der'borough, urb. dist., Northants, England, 5 m. S.E. of Market Harborough; boot and shoe manufacture; iron ore. Pop. 4,400.

Des Moines (*dê moîn'*), cap. and largest city, Iowa, U.S.A., on Des Moines R.; rly. centre; in coal dist.; printing and publishing; foundry and machine-shop products. Pop. 142,000.

Dessau (*des'au*), cap., Anhalt, Germany, on R. Mulde, near its confluence with R. Elbe; sugar refining; chemicals; textiles. Pop. 71,500.

Det'mold, cap., Lippe-Detmold, Germany, on E. slope of Teutoburger Forest; 47 m. S.W. of Hanover; linen weaving, tanning, brewing; marble quarrying. Pop. 16,000.

Detroit'. (1) Cap., Michigan, U.S.A., on Detroit R., connected by tunnel and train ferries with Windsor, Ontario; important rly. centre; ranks next to New York and Chicago in value of its manufactures; owes its rapid rise to increasing production of motor-cars; excellent harbour, with extensive docks; largest exporting tn. on Great Lakes; grain, lumber; motor-cars; aircraft; shipbuilding; foundry and machine-shop products, slaughtering and meat-packing. Pop. 1,574,000. (2) Riv., Michigan, U.S.A., connecting Lake St. Clair with L. Erie; length, 25 m.; carries more shipping than any other waterway in the world; navigable for c. eight months in the year.

Det'tingen, vil., Bavaria, Germany, on R. Main, 17 m. S.E. of Frankfurt; here George II defeated French (1743).

Deux-Sèvres (*doo-sivvr*), dep., w. France; formed of parts of old prov. of Poitou; textiles; agriculture; vineyards; coal, marble, granite; chief tn., Niort. Area, 2,337 sq. m.; pop. 310,000.

Dev'enter, tn., Overijssel, Holland, on R. IJssel; carpet factories. Pop. 35,000.

Devil's Island, French Guiana. See **ILE DU DIABLE**.

Devi'ses, mkt. tn., Wilts, England, on Kennet and Avon Canal; corn exchange; grain trade; makes agricultural implements. Pop. 6,100.

Dev'on, co., s.w. England; bounded n. by Bristol Channel, w. by Cornwall, s. by English Channel, e. by Dorset and Somerset; coast (especially n.) bold and rugged, with fine rock scenery; inland surface hilly and uneven; Dartmoor in s.; Exmoor in n.; less elevated parts fertile and well cultivated; South Hams especially rich in orchards; riv. valleys beautiful and well-wooded; one of the chief cattle and sheep raising counties; hardy ponies on Dartmoor and Exmoor; cider and clotted cream; pilchard and other fisheries; copper, tin, manganese, granite, slate, marble, and potters' clay. Chief rivs. (Exe, Dart, Tamar, Teign, Taw, Torridge, and Plym) rise mostly in Dartmoor and abound in trout. Torquay, Sidmouth, and Teignmouth are health resorts, on account of mild climate in s. Other tns. are Exeter (cap.), Plymouth, Tiverton, Barnstaple, Dartmouth, and Tavistock. Area, 2,605 sq. m.; pop. 732,900.

Dev onport. (1) Munic. and parl. bor., Devonshire, England, part of Plymouth; most westerly of the 'Three Towns' (Plymouth, E. Stonehouse, and Devonport—one town since 1914), at head of Plymouth Sound; on e. shore of Tamar estuary; royal dockyard; important naval and military station. Pop. 70,500. (2) Tn. on mouth of R. Mersey, Tasmania; third port of island. Pop. 3,500.

Dewa'bury, munic. and parl. bor.,

W. Riding, Yorks, England, on R. Calder, 8 m. s. of Leeds; heavy woolen cloths, blankets, druggets, rugs; dye works; glass-houses; iron foundries. Pop. 54,300.

Dhanushkodi, tn., Madras, India, on isl. at entrance to Palk Strait; ferry port for passenger traffic from India to Ceylon.

Dhar. (1) Indian state, Central India; grain and cotton are exported. Area, 1,778 sq. m.; pop. 230,500. (2) Cap. of above, 45 m. s.w. of Indore; centre of grain trade. Pop. 16,000.

Dharm'sala, hill station, and headquarters of Kangra dist., Punjab, India, 100 m. n.e. of Amritsar; sanatorium; alt. 6,000 ft.; imposing scenery. Pop. 5,000.

Dhar'war, dist., Bombay, India; cotton ginned and manufactured; gold mines. Cap. Dharwar, 70 m. e. of Goa. Area, 4,600 sq. m.; pop. 1,037,000.

Dholpur'. (1) Indian state, Rajputana, India; crossed in s.w. by range of sandstone hills much quarried for local building and export purposes. Area, 1,155 sq. m.; pop. 230,000. (2) Cap. of above, 34 m. s. of Agra by rail; cattle and horse fair (Oct.). Pop. 16,500.

Dh'ran'gadra. (1) Indian state, Kathiawar, India; cotton and grain; salt. Area, 1,167 sq. m.; pop. c. 100,000. (2) Cap. of above, 75 m. w. of Ahmadabad; brass vessels, cloth and pottery. Pop. 18,000.

Dhulia (*doo-lē-ā*), tn., Khandesh dist., Bombay, India, 120 m. e. of Surat; important trade in cotton and linseed; cotton and woollen cloth. Pop. 31,000.

Diakovo. See **DJAKOVO**.

Diamantina (*dē-ā-mān-tē-nā*), tn., Minas Geraes, Brazil, 340 m. n. of Rio de Janeiro; diamond fields; agricultural dist.; manufactures cotton, leather, and cheese; diamond cutting. Pop. 15,000.

Diarbek'e. (1) Vilayet, Asia Minor, Turkey; traversed by upper Tigris; mountainous; stock raising; fruit; copper; galena; inhabitants mainly

nomads. Area, 14,480 sq. m.; pop. 195,000. (2) Cap. of above, at head of navigation of R. Tigris; citadel on rock 1,950 ft. high; morocco leather, filigree work, cotton, silk, mohair, copper ore, sheep and goat skins. Pop. 98,000 (Turks, Kurds, Arabs, Armenians).

Dibrugarh (*dē-broo-gur*), tn., headquarters of Lakhimpur dist., Assam, India; terminus of rail and steamer communication along Brahmaputra from Calcutta; coal mines. Pop. 16,000.

Die'denhofen. See THIONVILLE.

Dieppe (*dē-ep*), port, Seine-Inférieure, France, on English Channel, 38 m. N. of Rouen; fashionable wat.-pl.; daily sailings between Dieppe and Newhaven (64 m.); harbour safe and deep; active foreign trade; important fisheries; shipbuilding; oil refining; machinery. Pop. 24,000.

Digne (*dēn'yi*), chief tn., Basses-Alpes, France, 70 m. N.E. of Marseilles; preserved fruits, honey, wax. Pop. 4,370.

Dijon (*dē-zhōn*), tn., Côte-d'Or, France, 196 m. S.E. of Paris; important rly. jn.; strongly fortified; great wine trade; state tobacco factory; breweries, distilleries, textile works. Pop. 76,000.

Dinan (*dē-non*), tn., Côtes-du-Nord, France, on l. bk. of R. Rance, 15 m. S. of St. Malo; noted for its mediæval houses and ramparts; tourist centre; leather, earthenware, cider. Pop. 9,000.

Dinant (*dē-non*), historic tn., prov. Namur, Belgium, on r. bk. of the Meuse, at the base of limestone cliffs on which stands a dismantled citadel; summer resort. Pop. 7,000.

Dinapore, tn. and cantonment, Patna dist., Bihar and Orissa, India, on r. bk. of Ganges; oil presses and printing works. Pop. c. 31,000.

Dinard (*dē-nâr*), tn., Ille-et-Vilaine, France; opposite St. Malo; chief wat.-pl. of Brittany. Pop. 8,000.

Dinaric Alps, connecting link between Julian Alps and mountain

system of W. Balkans, stretch along E. shore of Adriatic Sea for 400 m. between Dalmatia and Bosnia. Highest peaks, Dinara (5,940 ft.) and Oryen (6,230 ft.).

Dindigul, tn., Madura dist., Madras, India, 25 m. S. of Trichinopoly; cigars, cotton, coffee, cardamoms. Pop. 31,000.

Dindings, THE, narrow strip of Brit. terr. along the coast of Perak, with off-lying Pangkor I., Malay Peninsula; included in Penang (Straits Settlements).

Dingle. (1) Port and mkt. tn., Kerry, I.F.S., on Dingle Bay; fishing (mackerel) centre; exports butter and fish. Pop. 2,000. (2) BAY, inlet in W. of Kerry, extends 24 m. inland and is 18 m. wide at entrance; famous for cliff scenery.

Ding'wall, mkt. tn. and royal burgh, Ross and Cromarty, Scotland, on Cromarty Firth; agricultural centre. Pop. 2,600.

Diredawa (*dē-rē-dā'wa*), tn., Abyssinia, about 25 m. N. of Harar, of which it is the station; linked with Jibuti, French Somaliland (190 m.), and Addis Ababa by rly.; rly. workshops, soap factory. Pop. 30,000.

Dirschau. See Tczew.

Dis'ko, large isl. off W. coast of Greenland, in Baffin Bay; Godhavn, in S., is seat of govt. of N. Greenland, and a rendezvous for whalers. Area, 3,200 sq. m.

Diss, mkt. tn., Norfolk, England, on R. Waveney; agricultural implement works. Pop. 3,400.

Dis'tington, par. and vil., Cumberland, England, 4½ m. N. of Whitehaven; coal mining. Pop. 2,100.

Dit'tersbach, tn., Silesia, Germany, 42 m. S.W. of Breslau; coal mining and chemicals. Pop. 15,000.

Diu (*dē-oo*), isl. and tn., S. extremity of Kathiawar peninsula, India; belong to Portugal. Area, 20 sq. m.; pop. 14,000.

Dizful, tn., Khuzistan, Persia, 32 m. N.W. of Shushtar; indigo; reed pens. Pop. 15,000.

Djakovo (*djā'kō-vō*), tn., Yugo-

slavia, 80 m. E. of Cetinje; agricultural produce. Pop. 8,000.

Dnepropetrovsk, formerly EKATERINOSLAV, tn., Ukraine, U.S.S.R., on r. bk. of R. Dnieper; ironworks; flour mills; coal, iron, and manganese in vicinity. Pop. 188,000.

Dnieper (*ně'pěr* or *dnyep'er*), riv., Ukraine, U.S.S.R.; rises in N. of Smolensk prov., flows generally s. into Black Sea at Kherson (ice-free for c. 277 days); length, c. 1,400 m.; navigable to Dorogobuzh; engineering works have overcome rapids to large extent; chief tribs., Berezhina, Priput, Desna; important fisheries.

Dniester (*ně's'tēr* or *dnyes'ter*), riv. between Ukraine and Romanian Bessarabia, rises in N.E. Carpathians (Czechoslovakia), and flows s.e. past Yampol rapids to enter Black Sea through a shallow lagoon on which is Cetatea Alba; fisheries; length, over 850 m.; drainage area, c. 30,000 sq. m.; traffic mainly in cereals and timber.

Do'ab, Ind. name for a tract of country between two rivs.; particularly land between Ganges and Jumna.

Dö'beln, tn., Saxony, Germany, 30 m. N.W. of Dresden; cloth; morocco leather; agricultural implements. Pop. 23,000.

Dobruja, region between lower Danube and Black Sea; mostly marshes and steppes; area, 9,000 sq. m.; chief port, Constanta, connected by rly. with Bucharest across famous Cernavoda bridge. Pop. c. 700,000.

Dode'cnesē, group of twelve islands in E. Mediterranean, N.E. of Crete; belong to Italy. Area, 455 sq. m.; pop. c. 80,000.

Dod'worth, urb. dist., W. Riding, Yorks, England, 2 m. S.W. of Barnsley; coal mining. Pop. 4,200.

Dog'ger Bank, extensive shoal, North Sea, 60 m. E. of N. England; sea depths vary from 6 to 20 fathoms; important fisheries.

Dogs, ISLE OF, peninsula, S.E. London, England; formed by bend of R. Thames opposite Greenwich; has Millwall docks and shipbuilding yards.

Dôle (*dōl*), chief tn., Jura, France, on R. Doubs; wine; copper; iron foundries; agricultural implements. Pop. 15,000.

Dolgely (*dol-geth'li*), mkt. tn., cap., Merionethshire, Wales; flannels, tweeds; lead, iron, and some gold found in vicinity; tourist resort. Pop. 2,300.

Dol'lar, par. and tn., Clackmannanshire, Scotland; coal and sandstone; extensive bleachfields. Pop. (tn.) 1,500.

Dol'omite, THE, group of limestone mts., s. Tirolese Alps, N.E. Italy; principal peak, Marmolata (c. 11,000 ft.); dist. much frequented by tourists; peaks assume fantastic forms.

Dolon Nor, tn., Mongolia, China, 160 m. N. of Peking; many Buddhist temples and ruins; manufactures iron and brass idols, bells, and vases. Pop. c. 30,000.

Dominica (*dom-in-ē'ka* or *dom-in'i-ka*), isl., Leeward group, Brit. W. Indies; surface mountainous; well covered with timber; fertile valleys, watered by numerous streams; of volcanic origin; contains sulphurous and thermal springs and famous 'Boiling Lake'; exports mainly limes, also coconuts, cocoa, oils, fruit. Cap. Roseau; principal harbour, Portsmouth, on St. Rupert's Bay on N.W. coast. Area, 305 sq. m.; pop. 41,000.

Dominican Republic. See SANTO DOMINGO.

Do'mo d'Os'sola, frontier tn., Piedmont, Italy, near R. Toce, c. 20 m. W. of upper part of L. Maggiore; tourist centre. Pop. 6,000.

Domrémy-la-Pucelle (*don-rā-mē' lā pu-sel'*), vil., Vosges, France, on R. Meuse; birthplace of Joan of Arc. Pop. 200.

Don. (1) Riv., Russia; rises in Lake Ivan, flows generally s. through N. Caucasian Area, enters Sea of Azov, forming delta 130 sq. m. in extent; length, 1,325 m.; important fisheries; navigable to Voronezh; in upper course connected with Volga

by canal. (2) Riv., Aberdeenshire, Scotland; enters North Sea near Old Aberdeen; salmon fishing; length, 82 m.

Donaghadee, port, seaside resort, co. Down, N. Ireland; flax mills; farm produce exported. Pop. 2,500.

Donau. See **DANUBE**.

Donauwörth (*dō'nou-voort*), tn., Bavaria, Germany, at confluence of Wörnitz with Danube; machinery; sawmills; breweries; trades in agricultural produce. Pop. 5,000.

Don Benito (*ben-ē'to*), tn., Spain, 60 m. E. of Badajoz; fruit and vegetable culture; woollens; wines. Pop. 21,000.

Doncaster, mkt. tn., W. Riding, Yorkshire, England, on R. Don; celebrated for annual race-meeting (St. Leger), dating from 1776; locomotive and carriage works of L.N.E. Ry.; breweries; large agricultural trade; great corn market; agricultural implements manufactured. Pop. 63,300.

Don Cossacks, former terr., Russia, in valley of Lower Don; now part of N. Caucasian Area; almost wholly steppe; elevated in N. and W.; soil very fertile; mineral products—iron, salt, gypsum; agriculture, cattle breeding, fishing, are important; extensive vineyards; ironworks, tobacco factories. Area, 63,532 sq. m.; pop. 4,013,400.

Donegal, or **TIRCONAILL**. (1) Co., N.W. I.F.S.; chief inlet, Lough Swilly; includes Aran I.; surface mainly barren mountain land with bogs and lakes; granite, marble; linen, woollens, muslin; fisheries; cap. Lifford. Area, 1,865 sq. m.; pop. 152,500. (2) Mkt. tn. and port of Donegal co., on Donegal Bay; homespun tweeds. Pop. 1,300.

Don gola, (1) Prov., Anglo-Egyptian Sudan, Africa; extends along both banks of R. Nile; Wadi el Kab (c. 60 m.) also has good arable land; much desert; chief grain crops, durra and barley; dates extensively cultivated; cotton; fine horses bred; cap. Merowé. Area, c. 141,000 sq. m.;

pop. c. 60,000. (2) New, tn. of above prov., on L. bk. of R. Nile, above third cataract; superseded Old Dongola (now a ruined city), 75 m. farther up the Nile; agricultural and trading centre. Pop. 15,000.

Doon, Loch, Ayrshire, Scotland, 3 m. S. of Dalmellington; 6 m. long by $\frac{1}{2}$ m. broad; has five islands; R. Doon, immortalized by Burns, flows from loch into Firth of Clyde (27 m.), 2 m. S. of Ayr.

Dorchester. (1) Co. tn. of Dorset, on R. Frome, England; centre of agricultural dist.; breweries. Pop. 10,000. (2) Vil., 9 m. S.E. of Oxford, with a fine abbey church. Pop. 900.

Dordogne (*dōr-don'ye*). (1) Navigable riv., S.W. France; rises on Puy-de-Saucy; flows W. to join estuary of Garonne; length, 300 m. (2) Dep., S.W. France; drained by R. Dordogne; surface in N. mainly sterile plateaus; large area is forest, with fertile valleys (agriculture, fruit growing); live-stock; minerals; wine; truffles. Chief tn., Périgueux. Area, 3,550 sq. m.; pop. 392,500.

Dordrecht, or **DORT**, tn., S. Holland, 11 m. S.E. of Rotterdam; resort of artists; sawmills; shipbuilding; sugar refining. Pop. 55,000.

Dorking, urb. dist. and mkt. tn., Surrey, England, 6 m. W. of Reigate; flour; lime; gives name to breed of poultry. Pop. 10,100.

Dornoch, royal burgh, co. tn., Sutherlandshire, Scotland, on Dornoch Firth; holiday resort; excellent beach; dry, bracing climate. Pop. 700.

Doroho'i, or **Dorocoi**, tn., Moldavia, Romania, 33 m. S.E. of Cernauti; timber; farm produce; great annual fair. Pop. 13,000.

Dorpat. See **TARTU**.

Dorsetshire, or **DORSET**, maritime co., S.W. England; bounded N. by Wilts, N.W. by Somerset, W. by Devon, S. by English Channel, E. by Hants; surface hilly; fine chalk-cliff scenery on coast; special features are Poole harbour, Purbeck Isle (a peninsula), St. Alban's Head, Isle of Portland

(connected with mainland by Chesil Bank), Portland harbour of refuge (a naval station); chalk hills or downs afford pasture for sheep; soil rich and well cultivated, particularly in Vale of Blackmore; orchards and dairy farms; quarries in Purbeck and Portland supply building stone, marble, pipeclay; manufactures paper, flax, hemp, silk, pottery; coast fisheries. Principal tns., Dorchester (co. tn.), Bridport, Poole, Weymouth, Swanage, Wareham, Shaftesbury. Area, 978 sq. m.; pop. 239,300.

Dortmund (*dort'moont*), tn., Westphalia, Prussia, on R. Emscher; extensive coalfields; iron and steel works; breweries; trade in corn and wood. Pop. 320,500.

Douai (*doo-ā'*), or **DOUAY**, tn., dep. Nord, France, on R. Scarpe, 17 m. s. of Lille; coal mining; iron and engineering works, ordnance works; glass; chemicals; sugar refineries; breweries; wool, paper, and leather factories. Here the 'Douai' Bible was prepared. Pop. 25,500.

Douarnenez (*doo-ar-ni-nā'*), tn., on Douarnenez Bay, s. of Brest harbour, France; coasting trade; sardine fishing and preserving. Pop. 11,000.

Douay. See **DOUAI**.

Doubs (*dooō*). (1) Riv., E. France; rises in Jura Mts., flows n.e., joins Saône at Verdun-sur-le-Doubs; length, 260 m. (2) Dep., E. France; watered by Doubs and affluents; traversed by Jura Mts.; good mountain pastures; dairy farming; plains produce wheat, oats, vines, and fruits; chief industries, watch making, iron-founding, brandy distilling; cap. Besançon. Area, 2,052 sq. m.; pop. 297,000.

Douglas (*dūg'las*). (1) Port and wat.-pl., cap. of Isle of Man; fine landing pier; contains House of Keys, meeting-place of Manx Legislature. Pop. 28,000. (2) Par., vil., Lanarkshire, Scotland, 11 m. s.w. of Lanark; remains of Sir Walter Scott's 'Castle Dangerous.' Pop. (par.) 3,000.

Doullens (*doo-lon'*), tn., Somme, France, 20 m. n. of Amiens; trades in phosphates; cotton, leather, and paper industries. Pop. 4,000.

Douro, riv., Spain and Portugal; flows generally w. and falls into Atlantic at Oporto; navigable for 90 m.; in Portugal flows through one of richest wine-producing regions in world; length, c. 485 m.

Dove (*dūv*), riv., Derbyshire and Staffs, England; rises s.w. of Buxton; enters Trent at Newton Solney; trout fishing; romantic scenery.

Do'ver. (1) Port and munic. bor., s.e. Kent, England, on Strait of Dover; chief port for passenger and mail traffic with Continent; was one of the Cinque Ports; Shakespeare's Cliff (350 ft.) on the w. pierced by rly. connecting Dover with Folkestone; Admiralty Pier (length, 780 yds., completed in 1871); commercial harbour (1901); Prince of Wales's Pier; great artificial naval harbour (1909); now commercial, modern residential town; popular wat.-pl. Pop. 41,100. (2) City, New Hampshire, U.S.A., 10 m. n.w. of Portsmouth; abundant water-power; cotton, woollen, and silk mills; machinery, shoes, lumber. Pop. 13,000.

Do'ver, STRAIT OF (Fr. *Pas de Calais*), channel connecting North Sea with English Channel, extending from Dungeness and Cape Grisnez to S. Foreland and Calais, 22 m.; breadth between Dover and Calais, c. 21 m.

Do'vercourt, seaside resort, Essex, England; at estuary of Stour, immediately s.w. of Harwich; chalybeate spring. Pop. 8,000.

Down, mar. co., N. Ireland; bounded n. by Antrim, w. by Armagh, s. by Carlingford Lough, e. by Irish Sea; n. hilly and fertile; in s. are Mourne Mts. and much waste land; chief rivs., Lagan and Bann; Lagan valley richest in cultivation; stock raising and dairy farming; fisheries; breweries; manufactures linen; principal tns., Downpatrick (co. tn.), Newry, Banbridge, Bangor. Area, 951 sq. m.; pop. 210,000.

Downham, or **DOWNHAM MARKET**, mkt. tn., Norfolk, England, on R. Ouse; tin-ware manufacture; flour mills; horse and cattle fairs; market gardening. Pop. 2,500.

Downpat'rick, mkt. tn., co. Down, N. Ireland; linen, soap, brewing, tanning. Pop. 3,100.

Downs. (1) Roadstead, off E. coast of Kent, England, between N. and S. Foreland; protected by Goodwin Sands. (2) Two ranges of chalk hills, s.e. England; N. Downs extend w. to E. from Hampshire through Surrey and Kent to Dover cliffs; S. Downs, in Hampshire and Sussex, terminate at Beachy Head; the two ranges enclose the Weald.

Down'ton, par. and tn., s. Wilts, England, on R. Avon; brick making, lime burning, tanning, paper making, and willow-basket industry. Pop. (par.) 2,000.

Drak'ensberg, mt. chain, S. Africa, between Orange Free State and Natal, extending for 500 m. from Great Fish R. to Olifants R.; culminates in Mont-aux-Sources (10,763 ft.); numerous passes; De Beers and Van Rieenen's Passes (5,000 ft.) are crossed by rlys. connecting Orange Free State and Natal.

Dram'men, tn., on riv. of same name, Norway, 33 m. s.w. of Oslo; rly. jn.; sawmills; shipbuilding yards; exports timber, wood-pulp, paper. Pop. 26,000.

Drä'va, r. bk. trib. of R. Danube; rises in Tirol, Austria; flows E. through Klagenfurt area and N. portion of Yugoslavia, then s.e., forming boundary between Yugoslavia and Hungary; length, 450 m.

Drente (*drent*), prov. Holland; E. of Zuider Zee; surface a sandy plateau of bleak moorland; chief tn., Assen; potatoes, rye; pigs. Area, 1,030 sq. m.; pop. 223,000.

Dres'den, cap., Saxony, Germany, on R. Elbe; Altstadt (old tn.) on l. bk., Neustadt (new tn.) on r. bk., connected by fine bridges; educational, sport, and tourist centre; within easy reach of beautiful Saxon Switzerland;

important rly. jn.; manufactures china, pianos, sewing machines, leather wares, chemical products, scientific instruments; great riv. trade. Pop. 619,000.

Dreux (*droo*), tn., Eure-et-Loir, France, 27 m. N.N.W. of Chartres by rail; boots and shoes. Pop. 9,500.

Drif'field, GREAT, mkt. tn., E. Riding, Yorks, England, 18 m. N. of Hull; chief tn. of the Wolds; agricultural centre; oilcake. Pop. 5,900.

Drighlington (*drieg'lington* or *dril'ington*), urb. dist., W. Riding, Yorks, England, 5 m. s.e. of Bradford; woolen and worsted manufacture. Pop. 4,100.

Drogheda (*drö'hed-a*), port, mkt. tn., munic. bor., Louth, I.F.S.; on R. Boyne; milling, brewing, iron casting, tanning; linen and cotton; salmon fishing; trades chiefly with Liverpool and Glasgow. Pop. 12,700.

Drohobycz (*drö'hö-bëch*), tn., Poland, 40 m. s.w. of Lwow; centre of large oilfield; oil-refining. Pop. 27,000.

Droitwich (*droit'ich*), munic. bor., mkt. tn., Worcestershire, England, 5 m. N.E. of Worcester; one of oldest centres of salt manufacture in England; brine springs; brine baths for rheumatic affections or dyspepsia. Pop. 4,600.

Drôme (*dröm*), dep., s.e. France; traversed by Isère, Drôme, and other tribs. of R. Rhone; surface mountainous; E. and S. partly forested; valley of Rhone fertile; wheat, olives, fruit, and wine; minerals include iron and lignite; silkworm rearing; flour milling; textiles; cap. Valence. Area, 2,532 sq. m.; pop. 264,000.

Dromore, mkt. tn., co. Down, N. Ireland, on upper Lagan; linen manufacture. Pop. 2,400.

Dron'field, tn., Derbyshire, England, 5 m. S. of Sheffield; iron industry the staple trade; foundries, hardware, edged tool factories; coal. Pop. 4,500.

Droyls'den, urb. dist., Lanes, England, E. suburb of Manchester; cotton mills, calico printing, chemical and dye works. Pop. 13,300.

Drummondville, tn., E. Townships, Quebec, Canada, 45 m. N.E. of Montreal; woollens. Pop. 6,000.

Dryburgh Abbey, monastic ruin, Berwickshire, Scotland, on R. Tweed, 4½ m. S.E. of Melrose; building dates from 1140, and was finally destroyed in Hertford's raid, 1545; tombs of Sir Walter Scott (1832) and Earl Haig (1928) in N. transept; abbey gifted to nation (1918) by Lord Glenconner.

Dual'a, port, French Cameroons, W. Africa; rly. to Yaunde.

Dub'bo, tn., New South Wales, Australia, on Macquarie R., 180 m. N.W. of Sydney; sawmills, factories, and tanneries; coal and copper found near. Pop. 5,000.

Dub'lin. (1) Co., Leinster, I.F.S.; bounded N. and W. by Meath and Kildare, S. by Wicklow, E. by Irish Sea; part of central limestone plain of Ireland; mountainous in S.; chief riv., Liffey; nearly half of total area under grass, over one-third under crops; oats, potatoes; live-stock; Grand and Royal canals traverse co.; rural pop. is densest in Ireland; chief tns. are Dublin (cap.), Rathmines, Pembroke, and Kingstown. Area, 358 sq. m.; pop. (including metropolis), 506,000. (2) Or BAILE ÁTHA CLIATH, city, port, parl. bor., and cap. of I.F.S.; at mouth of R. Liffey on Dublin Bay; principal suburbs are Kingstown, Pembroke, Rathmines, Clontarf, Dalkey, and Killiney; R. Liffey crossed by twelve bridges; banks lined with quays; near mouth of riv. are extensive docks; centre of entrepôt trade; manufactures porter, whisky, and poplin; has foundries, shipbuilding yards, and a considerable export trade in whisky, porter, and agricultural produce. Pop. 419,000.

Dubois (*doo-bois'*), city, Pennsylvania, U.S.A., 75 m. N.E. of Pittsburgh; foundries, lumber, leather, flour. Pop. 14,000.

Dubrov'nik, formerly RAGUSA, port, Dalmatia, Yugoslavia, on Adriatic Sea; fruit, liqueurs, cheese, silk; oil refining; metal work. Pop. 8,500.

Dubuque (*doo-book'*), city, Iowa, U.S.A., on R. Mississippi; manufactures of machinery; pork packing. Pop. 42,000.

Duchcov (*dook'tsof*), tn., N.W. Bohemia, Czechoslovakia, 5 m. S.W. of Teplice; lignite in dist.; glass, pottery, sugar. Pop. 15,000.

Dud'ley, mkt. tn., in part of Worcestershire enclosed in Staffs, England; in midst of 'Black Country'; important seat of hardware trade; motor-cars, iron and brass founding, glass. Pop. 59,600.

Dudweiler (*dood'vî-lër*), tn., Saar Dist.; coal mines, ironworks. Pop. 21,600.

Duffield, par. and tn., Derbyshire, England, on R. Derwent, 4 m. N. of Derby; a place of great antiquity. Pop. 2,000.

Dufftown, tn., Banffshire, Scotland; distilleries, lime works. Pop. 1,500.

Du'isburg, tn., Rhineland, Prussia, at confluence of Ruhr with R. Rhine; riv. port; exports coal; chemicals, brass goods, sugar, textiles. Since 1905 includes Meiderich. Pop. 275,000.

Dukeries, dist. of Sherwood Forest, Notts, England; so called from ducal mansions in neighbourhood.

Duke Town. See CALABAR.

Du'kinfield, tn., Cheshire, England, 4 m. E. of Manchester; collieries; cotton; iron, brick, and tile works. Pop. 19,300.

Dulcigno. See ULCINJ.

Dül'ken, tn., Rhineland, Prussia; 11 m. S.W. of Crefeld; iron foundries; textiles. Pop. 15,500.

Duluth', city, Minnesota, U.S.A., at W. end of L. Superior; head of navigation on Great Lakes; terminus of several rlys.; fine natural harbour; dockyards; trade in grain, iron ore, lumber; iron and steel manufactures; stockyards. Pop. 101,000.

Dulwich (*dül'ich*), suburb of London, in bor. of Camberwell; famous college. Pop. 61,300.

Dumaguete (*doo-mû-gâ'tâ*), tn., cap. of Negros, Philippines, on Tañon Strait; centre of rich agricultural dist. Pop. 16,500.

Dumbar'ton, co. tn., parl. and royal burgh and port, Dumbartonshire, Scotland, on Firth of Clyde; shipbuilding yards; famous old castle. Pop. 21,500.

Dumbar'tonshire, co., Firth of Clyde, Scotland; n. dist. round Lochs Lomond and Long is mountainous; central region less wild; s. dist., with Clyde seaboard, Vale of Leven, and main portion of co., rich and pleasantly varied; sheep farming; industries include cotton works, calico printing, bleaching, dyeing, paper making, shipbuilding, fisheries, coal mining; chief tns., Dumbarton (co. tn.), Clydebank, Helensburgh. Area, 246 sq. m.; pop. 147,800.

Dumfries', tn., royal and parl. burgh, Dumfriesshire, Scotland, on R. Nith; includes Maxwelltown; cattle markets; manufactures woollens, tweeds, and hosiery; saw mills. Pop. 22,800.

Dumfries'shire, border co., Scotland; bounded on s. by Solway Firth; mts. include Hart Fell (2,651 ft.), Queensberry (2,285 ft.), Blacklorg (2,231 ft.); n. region constitutes part of Southern Uplands; s. region drained by rvs. Nith, Annan, and Esk; co. agricultural and pastoral; commerce mostly conducted through Dumfries; chief tns., Dumfries (co. tn.), Annan, Lockerbie, Langholm, Moffat. Area, 1,078 sq. m.; pop. 81,100.

Düna. See DVINA, SOUTHERN.

Dunbar', port, E. Lothian, Scotland; potatoes exported; agricultural implements, rope making and brewing; holiday resort. Pop. 3,800.

Dunblane', tn., s. Perthshire, Scotland, on R. Allan; cathedral; mineral spring; wool and worsted works; holiday resort. Pop. 2,700.

Duncasaby Head, cape, Caithness, Scotland; n.e. extremity of mainland; 1½ m. E. of John o' Groat's House.

Dundalk (*dün-dawk'*). (1) Port, Louth, I.F.S., at mouth of Castleton R.; locomotive works; breweries and distilleries; shipbuilding yards; flax

and jute spinning; fishing; dairy produce. Pop. 14,000. (2) Bay, shallow inlet of Irish Sea on which above is situated; oyster beds.

Dundas', tn., Ontario, Canada, at w. end of Lake Ontario; leather, paper, textiles. Pop. 5,000.

Dundee'. (1) Royal burgh, port, and third Scottish city, on Firth of Tay, Angus, Scotland; staple industry, jute manufacture; other manufactures, hemp and flax goods, linoleum, machinery, preserves, and confectionery; shipbuilding; extensive fisheries; harbour with fine docks; Tay Bridge (2 m. 73 yds.) over riv. Pop. 175,600. (2) Tn., Natal, S. Africa, 40 m. N.E. of Ladysmith; coal mining; alt. 4,098 ft. Pop. 4,000 (whites, 1,800).

Dundonald, coast par. and vil., Ayrshire, Scotland, 5 m. S.W. of Kilmarnock; coal mines and sandstone quarries. Pop. (par.) 18,400.

Dunedin, tn., South Island, New Zealand; cap. of Otago prov.; at head of Otago harbour; founded and called after Edinburgh by Scottish settlers (1848); exports wool, dairy produce, and frozen meat; has riv. workshops. Pop. 85,000.

Dunfermline, royal and parl. burgh, Fife, Scotland; birthplace of Andrew Carnegie, who gave (1903) £500,000 for town's benefit; seat of damask linen trade; rubber works; coalfields; burgh includes Rosyth, on Firth of Forth. Pop. 35,000.

Dunganon, mkt. tn., Tyrone, N. Ireland; linen, fire-bricks, earthenware; workable coal in vicinity. Pop. 3,800.

Dungarpur'. (1) Indian state, Rajputana, India; agriculture. Area, 1,447 sq. m.; pop. 190,000. (2) Cap. of above, 50 m. S. Udaipur; makes articles from local greenstone and from teak. Pop. 7,500.

Dungarvan, port, tn., co. Waterford, I.F.S., 28 m. W.S.W. of Waterford; brewing, woollens. Pop. 5,200.

Dungeness (*dünj-nes'*), low shingly headland, s. extremity of Kent, England; lighthouse.

Dunkeld', tn., Perthshire, Scotland, on R. Tay at entrance to Strathmore; cathedral; fishing and tourist resort. Pop. 1,000.

Dun'kirk. (1) (French *Dunkerque*) Port, Nord, France, on Strait of Dover; third Fr. port; large artificial harbour; extensive and varied manufactures and exports, and important fisheries; shipbuilding. Pop. 31,000. (2) Port, New York state, U.S.A., on L. Erie; extensive lake trade; iron and lumber manufactures. Pop. 20,000.

Dun Laoghaire (*lō'ri*). See KINGS-TOWN.

Dunmore', tn., Pennsylvania, U.S.A., adjoining Scranton; anthracite coalfields; silk. Pop. 25,000.

Dunmow'. (1) GREAT, mkt. tn. and par., Essex, England, on R. Chelmer. Pop. (par.) 2,500. (2) LITTLE, vil., 2 m. E. of Great Dunmow; custom of 'Dunmow Flitch' originated here. Pop. 300.

Dunoon', wat.-pl., Argyllshire, Scotland, on Firth of Clyde; remains of ancient castle. Pop. 8,800.

Duns, co. tn., Berwickshire, Scotland; market; blankets. Pop. 1,800.

Dunsink', hill, Dublin, I.F.S., 4 m. N.W. of Dublin; 310 ft. high; observatory of Trinity College on summit.

Dun'stable, mkt. tn., s. Beds, England; printing, engineering. Pop. 9,000.

Dun'ster, mkt. tn., Somersetshire, England, 2 m. S.E. of Minehead; fine Norman castle. Pop. 700.

Duntocher (*dūn-toch'ēr*), tn., Dumbartonshire, Scotland, 9 m. N.W. of Glasgow; Roman remains. Pop. 3,500.

Dunwich (*dūn-ich*), wat.-pl., E. Suffolk, England; anc. capital of E. Anglia; some fishing. Pop. c. 200.

Duquesne (*doo-kān'*), city, Pennsylvania, U.S.A., 9 m. S.E. of Pittsburgh; steelworks. Pop. 19,000.

Durance (*du-rōns'*), riv., France, rises in Alps and falls into Rhone below Avignon; rapid current; valuable for irrigation; length, c. 220 m.

Durango. (1) Inland state, N.W. Mexico; crossed by Sierra Madre Mts.; climate dry and healthy; soil very fertile; few streams; silver, gold, copper, iron; wheat, tobacco, fruits, sugar-cane. Area, 42,272 sq. m.; pop. 337,000. (2) Cap. of above, 130 m. N.E. of Mazatlan, on Pacific coast; mt. of high-grade iron ore to N.W. Pop. 39,000.

Durazzo (*doo-rāt'sō*), port, Albania; exports grain, olive oil, sheep. Pop. c. 10,000.

Dur'ban, formerly PORT NATAL, chief port and largest tn., Natal, S. Africa; harbour with projecting 'Bluff'; beautifully laid-out city; Berea, handsome suburb; much of Transvaal and Orange Free State trade passes through town; many industries; coaling port; whale and other fisheries; exports maize, wool, wattle bark, hides, skins, Angora wool. Pop. 187,000 (70,000 whites; as many Asiatics).

Düren, tn., Rhineland, Prussia, 23 m. S.W. of Cologne; textiles, sugar, steel, and paper; military barracks. Pop. 37,000.

Durham (*dūr'am*). (1) Co., England; bounded N. by Northumberland, W. by Westmorland and Cumberland, S. by Yorks, E. by North Sea; in W. are branches of Pennine Range where chief rivers (Derwent, Tees, Wear) rise, and stretches of bare moorland rich in minerals; in E. are fertile and well-wooded valleys where celebrated cattle are reared; coal mines are among most productive in England; co. also produces limestone, slate, black marble, lead, zinc, firestone, and ironstone; chief industry shipbuilding, especially on R. Tyne; manufactures include iron, glass, chemicals, salt, and earthenware; chief tns., Durham, Sunderland, Darlington, Gateshead, S. Shields, Stockton, E. and W. Hartlepool, and Jarrow. Area, 1,014 sq. m.; pop. 1,486,000. (2) Co. tn. of above, parl. and munic. bor.; almost surrounded by R. Wear. Cathedral and university. Manufactures include iron-

ware, carpets, and mustard; coal mines in neighbourhood. Pop. 16,200. (3) City, N. Carolina, U.S.A., 20 m. N.W. of Raleigh; tobacco factories; cotton and hosiery mills. Pop. 52,000.

Durlach (*door'läch*), tn., Baden, Germany, 2½ m. E. Karlsruhe; manufactures vinegar, chicory, tobacco, machinery; mineral baths. Pop. 15,000.

Durs'ley, mkt. tn., Gloucester, England, 13 m. S.W. of Gloucester; manufactures pins, cycles, dairy appliances, agricultural implements, and twine. Pop. 3,000.

Düsseldorf, tn., Rhineland, Prussia; busy river port on Rhine; important rly. jn.; manufactures iron, chemicals, pianos, cotton, paper, glass. Pop. 430,000.

Dutch Borneo. See BORNEO.

Dutch East Indies. See EAST INDIES.

Dvina (*du'vna*). (1) NORTHERN

DVINA, riv., Russia; has origin in two head-streams in Vologda; enters White Sea by wide estuary, 25 m. below Archangel; length, c. 780 m., of which over 350 m. navigable for about 174 days; connected by canal with Neva and Volga. (2) SOUTHERN DVINA (Ger. *Düna*), riv., Russia and Latvia; rises near sources of Volga and Dnieper, flows S.W. to Vitebsk, then N.W. past Daugavpils to Gulf of Riga; length, c. 650 m.; small vessels ascend to Vitebsk; mouth frozen Dec. to March.

Dvinsk. See DAUGAVPILS.

Dyetskoye Selo' (*dyets'ko*), tn., European Russia; 15 m. S. of Leningrad; health resort; former imperial palaces, etc., now educational and medical establishments for children. Pop. 19,500.

Dyirbekir. See DIARBEKR.

Dysart (*di'sart*), port, Fife, Scotland, on Firth of Forth; linens, woollens; exports coal. Pop. 4,600.

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Eaglehawk', tn., Victoria, Australia, 4½ m. from Bendigo by tram-rail; gold mining. Pop. 4,800.

Eagle Pass, tn., S.W. Texas, U.S.A., on Rio Grande; fodder crops and onions. Pop. 5,800.

Ealing (*ē'ling*), munic. bor., W. suburb of London, 9 m. W. of St. Paul's Cathedral; wholly residential. Pop. 117,700.

Earlestown (*erls'ton*), par., urb. dist. Newton-in-Makerfield, Lancs, England, 5 m. N. of Warrington; engineering, and glass works; sugar refinery. Pop. 16,000.

Earl's Court, dist., Kensington, London; noted for exhibitions.

Earls'ton, par. and mkt. tn., Berwickshire, Scotland, on R. Leader, 4 m. N.E. of Melrose; fragment of old tower of Thomas the Rhymer, with whom vicinity is associated; woollen goods; cattle and sheep markets. Pop. of par. 1,600.

Earn (*em*). (1) Loch, Perthshire, Scotland; 6 m. long, average width ½ m. (2) Riv., Perthshire, issues from E. end of loch; joins R. Tay 6½ m. S.E. of Perth; salmon and trout.

Earsdon (*urs'don*), urb. dist., Northumberland, England, on coast 4 m. N.W. of N. Shields; coalmining. Pop. 13,100.

Easdale (*ēs'dāl*), isl., Firth of Lorn, Argyllshire, Scotland, 11 m. S.W. of Oban; slate quarries. Pop. 85.

Easingwold, tn. and par., N. Riding, Yorks, England, 13 m. N.W. of York; agricultural trade; Roman remains. Pop. (par.) 2,000.

East Barnet Valley, urb. dist., Herts, England, adjoining Barnet; part of Greater London; residential dist. Pop. 18,500.

Eastbourne, munic. and co. bor., seaside resort, Sussex, England; fine sea-front and handsome parades; Beachy Head (575 ft.) shelters town

on the s.w.; Roman antiquities; boat building, and some fishing. Pop. 57,400.

East Calder. See CALDER.

East Chicago (*she-há'go*), city, Indiana, U.S.A., on L. Michigan, 17 m. s.e. of Chicago; port; iron and steel works; oil refineries. Pop. 55,000.

East Cleveland, city, Ohio, U.S.A.; residential suburb of Cleveland. Pop. 40,000.

East Dereham, mkt. tn., Norfolk, England, 16 m. n.w. of Norwich; agricultural implements and silver-smith's work. Pop. 5,600.

East'er Island, volcanic isl., Pacific Ocean, 2,000 m. from the coast of Chile, S. America; noted for remarkable stone images and ruins of stone houses with wooden tablets incised with picture writing in an unknown tongue. Area, 55 sq. m.; pop. 250.

Eastern Townships, dist., Quebec, Canada, between U.S. boundary and riv. St. Lawrence; comprising 12 cos.; traversed by w. ridges of Notre Dame Mts.; agriculture, dairying, and stock raising; asbestos and copper mined; maple-sugar industry. Founded by United Empire Loyalists, 1783. Chief tn., Sherbrooke.

East Grin'stead, mkt. tn., Sussex, England, 30 m. s. by e. of London; brewing, brick and tile making. Pop. 7,900.

East Ham, par. and co. bor., Essex, England, 6 m. e. of London; part of Greater London; chemicals. Pop. 142,500.

East Indies, or MALAY ARCHIPELAGO, the double chain of isls. extending from the s.e. corner of Asia to the n. extremity of Australia. On the Pacific side are the islands of Borneo, Celebes, Sula Islands, Buru, Halma-hera, Amboina, Ceram, Waigeu, and New Guinea. The Sulu Islands and the Philippines are a northward extension of this chain. Next the Indian Ocean the chain includes Sumatra, Banka, Billiton, Java, Madura, Bali, Lombok, Sumbawa, Sumba, Flores, Timor, and the Tenimber, or Timor-

Laut, Kei, and Aru groups. The Philippines and Holo Islands belong to U.S.A., the n. part of Borneo and the e. portions of New Guinea form part of Brit. Empire, the e. half of Timor is Portuguese; all the others form the Dutch E. Indies. Several of the islands (e.g. Java, Sumatra) are studded with active volcanoes. Their climate is hot; and it is also moist, for they fall within the influence of the monsoons. Products are of a tropical character—spices, fruits, coffee, sugar, cacao, rubber, indigo, tobacco, bamboo. The inhabitants are mostly of the Malay race. Area, c. 1,000,000 sq. m. Pop. over 60,000,000.

Eastleigh and Bishopstoke, urb. dist., Hants, England, $5\frac{1}{2}$ m. n.e. of Southampton; rly. jn. and rly. workshops. Pop. 18,300.

East Liverpool, city, Ohio, U.S.A., on Ohio R., 84 m. s.e. of Cleveland; great porcelain factories; brick-yards, steelworks; rubber tyres. Pop. 25,000.

East London, port, and popular resort, Cape Prov., S. Africa, at mouth of Buffalo R.; chief exports, wool and mohair. Pop. 23,000.

East Lo'thian, formerly HADDINGTONSHIRE, maritime co. in s.e. of Scotland, bounded by Firth of Forth, North Sea, Berwickshire, and Midlothian. Lammermuir Hills rise in s.; highest point, 1,750 ft.; centre and n. mostly plain. Watered by R. Tyne. Chief industries are agriculture (cereals and potatoes), sheep farming, coal mining, and sea fishing. Co. tn., Haddington. Area, 267 sq. m.; pop. 47,400.

Easton, city, Pennsylvania, U.S.A., on Delaware R., 60 m. n. of Philadelphia; in area rich in iron ore, brick clay, coal; produces steel, machinery, cement, furniture. Pop. 35,000.

East Orange, city, New Jersey, U.S.A., 12 m. w. of New York city; residential suburb; electrical apparatus; pharmaceutical supplies. Pop. 68,000.

East Providence, tn., Rhode I., U.S.A., on Narragansett Bay and

Seckonk R.; chemicals; wire; oysters. Pop. 26,000.

East Prussia, detached prov., Prussia; bounded on n.w. by Baltic Sea, w. by terr. of Free City of Danzig, s. by Poland, n. and e. by Lithuania. Coast fringed with lagoons. Surface generally low, except in the s., which is traversed by a plateau containing numerous small lakes; about half of prov. is cultivated; oats, rye, potatoes, flax; horse and cattle breeding; coast region yields much amber; cap. Königsberg. Area, 1,304 sq. m.; pop. 2,256,000.

East St. Louis, city, Illinois, U.S.A., on Mississippi R., opposite St. Louis, with which it is connected by three bridges; great rly. centre; national stockyards just outside city limits; slaughtering and meat packing, machine shops, foundries; chemicals, glass bottles, petroleum products. Pop. 74,000.

Eastview, tn., Ontario, Canada; E. suburb of Ottawa. Pop. 5,730.

East Windsor, formerly FORD CITY, city, Ontario, Canada, on Detroit R., 2½ m. E. of Windsor, of which it is an industrial suburb. Pop. 15,000.

Eastwood, urb. dist., Notts, England, 9 m. n.w. of Nottingham; coal mining. Pop. 5,400.

Eat'on, LONG. See LONG EATON.

Eat'on Soc'on, par. and vil., Beds, England, on R. Duse, near St. Neots; market gardening. Pop. (par.) 2,200.

Eau Claire (*ô klâr*), city, n.w. Wisconsin, U.S.A., on the Chippewa R.; busy manufacturing and commercial city; exports lumber; makes paper, linen, furniture; fish hatchery. Pop. 26,000.

Ebbw Vale (*eb'oo*), urb. dist., Monmouthshire, England, 21 m. n.w. of Newport; coal and iron mines, iron and steel works. Pop. 31,700.

Eberbach (*ä'ber-bäch*), tn., Baden, Germany, on R. Neckar, 13 m. E. of Heidelberg; chemicals, cigars; trades in timber and wine. Pop. 7,000.

Eberswalde (*ä'bers-wal-di*), tn., Brandenburg, Prussia, 27 m. N.E. of Berlin;

ironworks; bricks; banknote paper. Pop. 29,500.

Ebingen (*ä'bing-en*), tn., Württemberg, Germany, 22 m. S. of Tübingen; textile manufactures and tanneries. Pop. 12,100.

E'bro, riv., Spain, rises on S. slope of the Cantabrian Mts., runs S.E. and E., and enters Mediterranean by a delta after course of 470 m.; only navigable for short distance; some progress in canalization.

Ecclefechan (*ek-el-fech'an*), vil., Dumfriesshire, Scotland, 5 m. N. of Annan; birthplace and burial-place of Thomas Carlyle. Pop. 800.

Eccles (*ek'els*), munic. bor., Lancs, England, 4 m. W. of Manchester; gingham, cotton thread, silk, and fustian; engine works. Pop. 44,400.

Ec'clesfield, tn. and par., W. Riding, Yorks, England, 5 m. N. of Sheffield; cutlery and tools; collieries, ironworks, and paper mills. Pop. 23,000.

Echuca (*e-chu'ka*), tn. and riv. port, Victoria, Australia, on Murray R., 115 m. N. of Melbourne; centre of a wine-producing and pastoral dist.; important irrigation works. Pop. 5,000.

Ecija (*ä'thë-ha*), tn., Seville, Spain, on R. Genil, 48 m. N.E. of Seville; olive oil, soap, candles, wine, pottery. Pop. 30,000.

Eck'ington, par. and tn., Derbyshire, England, 7 m. S.E. of Sheffield; agricultural implements; large collieries. Pop. 12,600.

Ecuador (*ek-wa-dor'*), republic, N.W. of S. America, crossed by equator; bounded N. by Colombia, N.E., E., and S. by Peru, W. by Pacific Ocean. The exact boundary between Peru and Ecuador is still unsettled. The surface consists of a low-lying coastal region stretching inland to the foothills of the Cordillera; the mountains of the Andes, with plateaus 9,000 ft. above sea-level; and a vast plain covered with forests—Provincia del Oriente—sloping eastward from Andes. Many peaks of the Andes in Ecuador are active volcanoes; princi-

pal summits, Chimborazo (20,500 ft.), Cotopaxi (19,610 ft.). Ecuador is drained to E. of Andes by R. Amazon system; on W. are Daule, Vinces, Guayaquil, and other rivers flowing to Pacific. The Galapagos Islands, 730 m. off W. coast, belong to Ecuador. Climate is tropical in lowlands; in highlands there is an equable perpetual spring. In the E. there is heavy rain throughout the year; in W. and mountain plateaus there is hot rainy season from Dec. till May. Gold is found; silver, petroleum, copper, and other minerals exist. Vegetation is everywhere luxuriant; cocoa is at present the staple product; sugar and coffee are also cultivated; cereals, tropical fruits, tobacco, vegetables, and cotton are produced, and in vast forests are valuable medicinal and other plants—sarsaparilla, balsams, cinchona, vegetable ivory, rubber. The industries are unimportant: straw (Panama) hats, and woollens; flour mills, breweries, sugar works; chief exports are cocoa, coffee, ivory nuts, petroleum, minerals; chief imports, foodstuffs, textiles, machinery, hardware. Cap. Quito. Area, c. 150,000 sq. m.; pop. c. 2,000,000.

Edam (*ā-dam*'), tn., Holland, 13 m. N.N.E. of Amsterdam, on Zuider Zee; cheese making. Pop. 8,200.

E'den. (1) Riv., England; rises in the Pennines, Westmorland, flows through the beautiful valley of Malerstang, and enters Solway Firth below Carlisle. Length, 65 m. (2) Riv., Fife, Scotland, flowing into St. Andrews Bay.

Edenbridge, mkt. tn. and par., Kent, England, 9 m. W. of Tonbridge. Pop. (par.) 2,900.

Edessa. See **URFA**.

Edfu (*ed'foo*), tn., Upper Egypt, on L. bk. of R. Nile, 50 m. S.E. of Thebes; has remains of Temple of Horus; earthenware manufacture. Pop. 20,000.

Edge'hill, hill ridge, s. Warwickshire, England, at base of Edge Hill, 3 m. S.E. of Kineton; scene of first battle of Civil War (1642).

Edinburgh, city, royal and munic. burgh, cap. of Scotland, on Firth of Forth; includes Leith, Portobello, Newhaven, Granton. Edinburgh is famed for its natural beauty, literary and romantic associations, and educational institutions. Its situation, its architecture, and its renown as a centre of learning have earned for the city the title of the 'Modern Athens.' Has famous Castle with Scottish National War Memorial; Palace of Holyroodhouse. Industries include printing, publishing, bookbinding, map making; insurance, banking, coal mining, brewing, distilling, rubber works, scientific instruments, paper making, fisheries. One of the greatest educational centres in the world; univ., founded 1582; great medical school. Pop. 439,000.

Leith is continuous with the city, and lies on the S. shore of the Firth of Forth; harbour works extensive. Industries: engineering, shipbuilding, flour milling, sugar refining, chemical manufactures, and saw milling. Chief imports: grain, flour, sugar, chemicals, esparto, and timber. Exports: coal, iron, petroleum, whisky, and paper. Although amalgamated with Edinburgh in 1920, the Port of Leith still retains its title.

Edirne. See **ADRIANOPLE**.

Ed'monton. (1) Tn., Middlesex, England, 7 m. N. of London; ammunition and varnish factories; brick works; market gardening. Pop. 77,700. (2) City, cap. of Alberta, Canada, at head of navigation of N. Saskatchewan R., 192 m. N. of Calgary; univ. with agricultural coll.; packing houses and creameries; centre of rich coal-mining and agricultural dist.; depot for fur trade. Pop. 65,200.

Edward, LAKE, Central Africa, in Uganda and Belgian Congo, is one of the great sources of the R. Nile; alt. 3,000 ft.; 44 m. long; 32 m. broad; connected with smaller L. George. Overflows to R. Nile by R. Ruchuru. Area, c. 820 sq. m.

Eecloo (*ā-klo*'), tn., E. Flanders,

Belgium, 11 m. N.W. of Ghent; textile industries. Pop. 13,300.

Eger (*áger*), (1) OF ERLAU, tn., Hungary, 90 m. N.E. of Budapest; wine, soap, candles, tobacco. Pop. 29,000. (2) See CHEB.

Egham, tn., Surrey, England, on R. Thames, 4 m. S.E. of Windsor; has Royal Holloway Coll. for higher education of women, and Holloway Sanatorium. Pop. 15,900.

Egin (*ágin*), tn., Asiatic Turkey, on r. bk. of R. Euphrates; see of Armenian archbishop; orchards; cotton, silk, leather, wine. Pop. 23,000.

Egor'levsk, tn., Russia, 60 m. S.E. of Moscow; dyes, cotton goods, buttons. Pop. 28,000.

Egremont. (1) Mkt. tn., Cumberland, England, 5 m. S.S.E. of Whitehaven; iron ore and limestone. Pop. 6,000. (2) Residential tn., Cheshire, England, 2 m. N.N.W. of Birkenhead; connected by ferry boat with Liverpool opposite. Pop. 16,000.

Egripo. See CHALCIS.

Egypt (*égypt*), kingdom, N.E. Africa; extends from Mediterranean Sea to Anglo-Egyptian Sudan, a distance of 680 m.; bounded on w. by Libya and on e. by Red Sea; includes peninsula of Sinai. Egypt, 'the gift of the Nile,' is divided into Upper and Lower Egypt, and consists of two main features, the desert and the Nile. In Upper Egypt (*i.e.*, from Halfa to Beni Suef, c. 600 m.) mountains approach closely to the Nile; Lower Egypt is an alluvial plain deposited by the river. Below Cairo the river divides and enters the sea by two mouths, which enclose the famous Delta. s. part of Delta extremely fertile, n. part sandy and marshy. The sea-water lakes near the coast (Mareotis, Burlos, Menzaleh) are almost bays. Upper Egypt is undulating plateau sloping from e. to w. The chief oases in the Libyan desert are Siwa, Bahariya, Farafra, Dakhla, Kharga, and Selima, which stretch n. to s. They have been used immemorially by caravans. The Suez Canal connects the Mediterranean with the Red Sea. The Delta is not very

(3,601)

healthy for Europeans, but the rainless, dry climate of the rest of the Nile valley has made it a health resort. In Upper Egypt the temperature sometimes rises to 140° F.; in Lower Egypt it varies from 50° to 60° F. in winter; and from 85° to 90° F. in summer. Snow occasionally falls on the highest mountains. The true Egyptian seasons are not, however, those of the sun, but of the Nile. See NILE. By the construction of dams and barrages perennial irrigation has been secured. Cotton, sugar, and rice are grown from March to Oct.; durra and vegetables, July to Oct.; wheat, barley, and other cereals, Nov. to May. More than half the native population is engaged in agriculture. Phosphates, petroleum, and manganese iron ore are the most important mineral products. Egypt exports cotton and cotton seeds, oilseed cake, eggs, manufactured tobacco, raw wool, hides, cane sugar, rice, henna, lentils, and tomatoes. Egyptian cigarettes are chiefly manufactured at Cairo and Alexandria, attar of roses at Cairo and in the towns of the Faiyum, where there are large rose gardens; salt is obtained in large quantities from L. Mareotis.

The R. Nile, navigable throughout Egypt, is still the great thoroughfare for trade and travel, but there are 3,000 m. of railway, of which two-thirds are in the Delta. Caravan routes run in all directions.

There are about 12,000,000 Mohammedans, 860,000 Copts (native Christians), 200,000 Christians of various denominations, and 60,000 Jews. Racially the population is chiefly composed of an Arab element, a Turk. element, and a Coptic element. From 1882 to 1922 Egypt was under Brit. control, though nominally a Turk. prov. In 1923 it was made an independent state. Cap. Cairo. Area, c. 383,000 sq. m. (cultivated area is only c. 13,600 sq. m.); pop. 14,187,000.

Ehrenbreitstein (*á-ren-brit'stin*), tn., Rhineland, Prussia, on R. Rhine, opposite Coblenz; known as 'the Gib-

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raltar of the Rhine' on account of its strong fortifications. Pop. 3,000.

Eickel (i'kel), tn., Westphalia, Prussia, 3 m. N.N.W. of Bochum; important coal mines. Pop. 33,500.

Eider (i'der), riv., Schleswig-Holstein, Prussia, enters North Sea; tortuous course; connected with Baltic by Kiel Canal; length, c. 117 m.

Eigg (eg), or Ego, isl., Inner Hebrides, Inverness-shire, Scotland; 6½ m. long by 4 m. broad; columnar cliffs. Pop. 190.

Eildon Hills (i'don), three peaks, Roxburghshire, Scotland, 1 m. from Melrose; highest peak, 1,327 ft.; near foot are remains of immense Roman encampment.

Eindhoven (in'd'ho-ven), tn., N. Brabant, Holland; textiles, tobacco, wireless apparatus, and electric bulbs. Pop. 69,000.

Eisenach (i'zen-ach), tn., N.W. Thuringia, Germany; near it is Wartburg, where Luther translated Bible; chemicals, woollens, pottery. Pop. 43,400.

Eisleben (is-lä'ben), tn., Saxony, Prussia, 24 m. W. of Halle; Luther's birthplace; mining centre; machinery, cigars. Pop. 24,000.

Ekaterinburg. See SVERDLOVSK.

Ekaterinodar. See KRASNODAR.

Ekaterinoslav. See DNEPROPETROVSK.

El'ba, Italian isl., Mediterranean Sea off W. coast of Italy; mountainous; produces iron, marble, wine, fish; Napoleon banished here (1814-15). Area, 140 sq. m.; pop. 26,200.

Elbasan, tn., Albania, 65 m. W. of Monastir, on R. Skumbi; iron and copper wares. Pop. 16,000.

Elbe (alb), large riv., Germany, rises on Bohemian side of Riesengebirge; flows through Bohemia, then passes through the magnificent scenery of the 'Saxon Switzerland' and through Prussia; 8 m. above Hamburg divides into several streams (which reunite at Blankenese), and enters North Sea at Cuxhaven. Chief tribs., Moldau, Eger, Schwarze-Elster, Mulde, Saale, Havel. Principal tns., Dresden, Hamburg,

Magdeburg. Elbe is navigable as far as confluence of Moldau, Bohemia; connected with Baltic and Oder by canals; total length, 725 m., of which over 500 m. are navigable.

El'berfeld, tn., Rhineland, Prussia; chief seat in Germany of cotton, wool, silk, velvet manufactures; leather, and rubber goods, stained glass. Pop. 168,000.

Elbeuf (el-boof'), tn., Seine-Inférieure, France, on L. bk. of R. Seine, 12 m. S. by W. of Rouen; woollens. Pop. 17,300.

El'bing, port, E. Prussia, Germany; has one of the largest shipbuilding yards in Germany; textiles, leather; ironworks. Pop. 68,000.

Elbrus (el-brus'), highest peak, Caucasus Mts., S.E. Europe; extinct volcano with two summits (alt. 18,470 ft. and 18,347 ft.); many glaciers.

Elburs (el-boors'), mts., N. Persia, to S. of Caspian Sea; highest peak, Demavend (over 19,000 ft.); the northern slopes densely forested and well watered; chief pass, Kharzan.

Elche (äl'chä), tn., S.E. Spain, 14 m. S.W. of Alicante; famous palm groves; rope-soled shoes, oil, soap. Pop. 33,000.

El Dorá'do, tn., Arkansas, U.S.A., 27 m. S.S.E. of Camden; centre of important oilfield. Pop. 30,000.

Elephant's Isle, isl., in Bombay harbour, India; rock-cut Hindu temples; sheep and poultry rearing.

El'ets (yi-lets'), tn., Russia, on R. Sasna, trib. of R. Don, 100 m. E.S.E. of Orel; iron foundries; tobacco; trade in cattle and cereals. Pop. 42,500.

El'gin. (1) Co. tn. and royal burgh, Moray, Scotland, on R. Lossie; has ruins of a fine cathedral; woollen mills, distilleries, sawmills, iron foundries. Pop. 8,800. (2) City, Illinois, U.S.A., 36 m. N.W. of Chicago; manufacture of watches; exports agricultural and dairy produce. Pop. 36,000.

Elginshire. See MORAY.

Elgon (el-gön'), extinct volcano (over 14,000 ft.), Uganda, Africa, on

border of Kenya; snow-capped; inhabited caves on s. face.

Elie (*ēli*), coast tn. and summer resort, Fife, Scotland, on Firth of Forth; golf links. Pop. (with Earlsferry) 1,100.

Elisavetgrad. See ZINOVIEVSK.

Elisavetpol (*yū-lē-zā-vet-pol'*). (1) Dist., Azerbaijan, U.S.S.R., extending from Caucasus to R. Aras; agriculture, carpet weaving, mining (copper, magnetic iron, cobalt). Cap. Gandzha. Area, 16,721 sq. m.; pop. 1,100,000. (2) See GANDZHA.

Eliz'abeth, city, New Jersey, U.S.A.; adjoins New York. Singer sewing machines; railway workshops; iron goods; oil refining; Princeton Univ. founded here. Pop. 115,000.

El Kantara, or QANTARA. See SUEZ CANAL.

Elk'hart, tn., Indiana, U.S.A., 80 m. E. of Chicago; manufactures paper, machinery, musical instruments. Pop. 33,000.

El'land, tn., W. Riding, Yorks, England, on R. Calder, 3 m. s. of Halifax; textile industries. Pop. 10,300.

Ellesmere (*el'mēr*). (1) Mkt. tn., Shropshire, England, 7 m. N.E. of Oswestry; agricultural centre; Ellesmere canal connects Rs. Mersey and Severn. Pop. 1,900. (2) Arctic region s. of Grinnell Land; barren and uninhabited.

Ellesmere Port and Whitby, urb. dist., Cheshire, England, 9 m. S.E. of Birkenhead; important port on Manchester Ship Canal. Pop. 18,900.

Ellice Islands (*el'les*), low coral islands, S. Pacific, n. of Fiji Is.; coconuts; form Brit. colony with Gilbert Is. Area, 14 sq. m.; pop. 3,600.

Ellichpur', tn., Berar, India, 35 m. N.W. of Amraoti; trade in cotton and forest produce. Pop. 24,000.

El'lis Island, small isl., New York harbour, U.S.A., 1 m. S.W. of Manhattan I.; since 1892 an important station for examination, etc., of immigrants.

Ellore (*el-ōr'*), inland tn., Madras, India, between mouths of R. Kistna

and Godaverī; carpets, hosiery, cotton, rice, and oil mills. Pop. 45,000.

Elmina (*el-mē'na*), port, Gold Coast Colony, Brit. W. Africa; trade in palm oil, gold, ivory. Pop. 5,000.

Elm'ra, city, New York, U.S.A., 80 m. S.E. of Rochester; railway centre; manufactures railway plant, agricultural implements, fire engines. Pop. 47,000.

El Obeid (*ō-bē-id'*), cap. Kordofan, Anglo-Egyptian Sudan, Africa; on extension of Cairo to Khartum railway; centre for gums, ivory, ostrich feathers. Pop. c. 17,000.

El Paso, city, Texas, U.S.A., on Rio Grande; smelting copper and lead ores; cotton factories; cattle products. Pop. 102,000.

Elsinore'. See HELSINGÖR.

Elswick (*els'ik*), formerly township, now part of city of Newcastle-on-Tyne, England. Manufactures hydraulic machinery; gun making.

El'vas, fort. tn., Portugal, 10 m. W. of Badajoz; plums, olives. Pop. 11,700.

El Wad, tn., Sahara, Africa, 125 m. S.S.E. of Biskra; fine palm groves. Pop. 8,600.

El'wood, city, Indiana, U.S.A., 40 m. N.E. of Indianapolis; trade in grain and live-stock; tinplate and glass. Pop. 12,000.

Ely (*ēli*), (1) ISLE OF, administrative co., N. part of Cambridgeshire, England. Area, 372 sq. m.; pop. 77,700. (2) Cap. of above, on R. Ouse; beautiful cathedral (11th cent.); numerous anc. buildings; isle was 'camp of refuge' of Saxons under Hereward the Wake; market gardens; beet-sugar factory. Pop. 8,400.

Elyria, city, Ohio, U.S.A., 8 m. S. of L. Erie; motor-cars, hardware. Pop. 26,000.

Em'den, fort. port, Hanover, Prussia, near mouth of R. Ems; ship-building, herring fisheries; manufactures ropes, cement, chemicals. Pop. 28,000.

Emilia (*ē-mēl'ē-a*), territorial div. of

Italy, lying s. of R. Po.; it includes the provs. of Bologna, Ferrara, Forlì, Modena, Parma, Piacenza, Ravenna, and Reggio; cereals, wine, fruits, rice, vegetables, sugar beet, flax. Area, 7,976 sq. m.; pop. 3,033,000.

Em'merich, tn., Rhineland, Prussia, on R. Rhine, near Dutch border; tobacco, chocolate, margarine, sugar; iron casting. Pop. 13,500.

Em'poll, tn., Florence, Italy, 20 m. w. of Florence; picture gallery; straw, cotton, and leather goods; pottery. Pop. 21,000.

Empo'ria, tn., Kansas, U.S.A., 52 m. s.w. of Topeka; trading centre of stock-raising and agricultural region; educational centre. Pop. 12,000.

Ems. (1) Wat.-pl., Hesse-Nassau, Prussia, Germany, on R. Lahn, 7 m. s.e. of Coblenz; thermal springs; silver and lead mining. Pop. 7,000. (2) Riv., Germany; flows n. through Westphalia and Hanover, entering North Sea by two mouths separated by I. of Borkum. Length, 300 m.

Ems'worth, port, Hants, England, on Sussex border; oysters. Pop. 2,500.

En'derby Land, desolate dist. in Antarctica, discovered by Captain John Biscoe (1831).

En'field, tn., Middlesex, England; part of Greater London; government small-arms factory; gave name to Enfield rifle. Pop. 67,900.

Engadine (*en-ga-dén*), upper valley of R. Inn, Grisons canton, Switzerland, amidst Alps; elevation, 4,000-6,000 ft.; great health centre in both summer and winter; fine scenery; contains Swiss National park. Chief tn., St. Moritz. Pop. 12,000.

Enghien (*en-gè-an*), tn., Hainaut, Belgium, 18 m. s.w. of Brussels; lace, linen, and cotton manufactures. Pop. 5,000.

Eng'land, with Wales, is s. part of Great Britain. Greatest length, 420 m.; greatest breadth, 360 m. Coast line is c. 1,800 m. Separated from Scotland by Cheviot Hills and R. Tweed. Welsh boundary is the w. border of Eng. counties of Cheshire,

Shropshire, Herefordshire, and Monmouthshire.

Deep bays on e. and w. coasts, with good harbours, cut into the country at nearly opposite points. On s. coast chief openings are Mounts Bay, Falmouth Harbour, Plymouth Sound, with Tor Bay, Weymouth Harbour, Poole Bay, and, between Hampshire and the Isle of Wight, the Solent and Spithead, with Southampton Water and Portsmouth Harbour running up into the land. Islands are Holy I. and Farne Islands (off Northumberland), the Isle of Wight (Hampshire), the Scilly Isles (Cornwall), Lundy Isle (Devon), Walney (Lancashire). The Channel Islands and Isle of Man do not form part of England.

A line of hills known as the Oolitic Escarpment runs from the Cleveland Hills, Yorks, s.w. to the Cotswold Hills; the part n.w. of this is of older geological character, and contains the mts. and coal measures of England. The mts. are: Pennine Chain, stretching s. from Cheviots to its s. culmination, the Peak, Derbyshire; Cumbrian mts. of Lake District (Scafell, 3,162 ft., Skiddaw, and Helvellyn are highest summits); Welsh or Cambrian Mts.; the s.w. mountains, comprising Exmoor and Dartmoor in Somerset, Devon, and Cornwall (chief heights, Dunkery Beacon, 1,707 ft., Yes Tor, 2,028 ft., and Brown Willy, 1,375 ft.), Mendip Hills, Somerset, Malvern Hills, Worcestershire, and Clee Hills and Wrekin, Shropshire. The newer s.e. portion of England contains Chalk Ridge, which runs s. from Flamborough Head as the York and Lincoln Wolds, E. Anglian Heights, Chiltern Hills, Marlborough Downs, to Salisbury Plain, from which North and South Downs extend e. to Dover Cliffs and Beachy Head respectively, and enclose district known as the Weald. This s.e. portion of England belongs structurally to Great Plain of Europe. Chief plains of England are Midland Plain, Plain of Lancashire and Cheshire, Vale of York, and Eastern Plain. The

Fens are a marshy district round the Wash; many of its towns, like Ely, were islands in Saxon times. A tract of clay known as the London Basin stretches from R. Thames along E. coast to N. of Norfolk, and round Portsmouth is another tract known as the Hampshire Basin. The R.s. Tyne, Wear, Tees, Ouse with most of its tribs., Trent and Witham, flow from E. slopes of Pennines into North Sea; the R.s. Lune, Ribble, and Mersey from W. slopes into Irish Sea. The two longest rivs. of England are the Severn and the Thames. Climate is temperate. Rainfall is abundant. Westerly winds with their warmth and moisture and the physical aspect of the country cause the western portions to have a higher (and more equable) temperature and greater humidity than the eastern parts.

The forty counties of England are: 1. (N.) Northumberland, Cumberland, Westmorland, Durham, Yorkshire, Lancashire; 2. (Midland) Derbyshire, Northamptonshire, Nottinghamshire, Staffordshire, Leicestershire, Rutlandshire, Warwickshire, Worcestershire, Oxfordshire, Buckinghamshire, Bedfordshire, Hertfordshire, Middlesex; 3. (W.) Cheshire, Shropshire, Herefordshire, Monmouthshire, Gloucestershire; 4. (E.) Lincolnshire, Norfolk, Cambridgeshire, Huntingdonshire, Suffolk, Essex; 5. (S.E.) Kent, Sussex, Surrey, Berkshire, Hampshire; 6. (S.W.) Dorsetshire, Devonshire, Cornwall, Wiltshire, Somersetshire. These are divided into fifty 'Administrative Counties.'

The railways are grouped into four systems—London, Midland and Scottish Railway; London and North-Eastern Railway; Great Western Railway; and Southern Railway; total mileage, 19,822. These groups radiate from London. There are 3,641 m. of canals.

England owes its industrial importance to coal. The coalfields belong almost entirely to the geological system of the N. and W. That of Northumberland and Durham has

made the Tyne ports busy commercial centres; in this district, iron, steel, chemicals, machinery, and ships are manufactured. The Cumberland field supplies coal for iron and steel works at Barrow-in-Furness. The West Riding of Yorkshire is the chief wool-manufacturing area; Sheffield has cutlery industry. The S. Lancashire coalfield maintains the great cotton industry of Lancashire. The coalfields of N. and S. Staffordshire contain respectively the Potteries and the Black Country. The Potteries import china-clay from Cornwall and flint from Kent and Sussex. The Black Country, in the heart of the Midlands, has both coal and iron ore. The coalfields of the Forest of Dean, Gloucestershire, and of Bristol have decayed in importance since working of richest Brit. field, that of S. Wales. After coal, iron is the most important mineral product; it is found near the coal, and also in the Cleveland district of Yorkshire. Other minerals are tin (Cornwall), lead, gypsum, fireclays, china-clay, and salt. Lincoln, Leicester, and the N. and S. Downs are famous for sheep, Yorkshire and E. counties for horses; wheat is chiefly grown in S.E. counties; hops grow in S., especially Kent, and also in Herefordshire. Fruit, grown widely, abounds in Kent, Herefordshire (both called the 'garden of England'), and S.W. generally; cider is made in Devon and Somerset. Commerce is of the greatest importance. Chief ports are London, Liverpool, Cardiff, Hull, Newcastle, Bristol, and Southampton. Fishing is an important industry. Cap. London. Area, 50,874 sq. m.; pop. 37,790,000.

English Channel, narrow sea between England and France; connected with North Sea by Strait of Dover, its narrowest part (c. 21 m.), and also its shallowest (12 to 13 fathoms); stretching W., joins Atlantic between Scilly Isles and Cape Ushant. Length, c. 350 m. Eng. coast extends from Strait of Dover to Land's End. Only important river it receives is

Seine, from France. In English Channel are Isle of Wight and Channel Islands.

Enid, city, Oklahoma, U.S.A., 42 m. n.w. of Guthrie; flour mills; iron-works; agricultural implements, tractors. Pop. 26,000.

Ennis, co. tn., Clare, I.F.S., 20 m. n.w. of Limerick; breweries, distilleries; flour mills. Pop. 5,500.

Enniscorthy, mkt. tn., Wexford, I.F.S., on R. Slaney; flour mills, breweries; mineral waters; woollens. Pop. 5,500.

Enniskillen, co. tn., Fermanagh, N. Ireland, on island between Upper and Lower Loughs Erne; flour mill; brewery; trade in corn. Pop. 4,900.

Enschede (*en-shê' de*), tn., Overijssel, Holland, near German boundary; cotton spinning and weaving. Pop. 49,500.

Entebbe (*en-teb' ä*), cap. Uganda, Africa, on n.w. shore of Lake Victoria; cotton ginning; fine botanic gardens. Pop. (white) 50.

Entre Minho e Douro, or **MINHO**, (*en-trä mên'yo ä döo'rô*), prov., Portugal, between Rs. Minho and Douro; produces grain, fruits, wine, cattle, textiles. Chief tn., Oporto. Area, 2,790 sq. m.; pop. 1,304,000.

Entre Rios (*en-trä rë'ôs*), prov., Argentine Rep., S. America, between Paraná and Uruguay rivs.; well-watered, undulating plain; one-fifth forested; wheat, linseed, alfalfa; stock raising and vine growing. Chief tn., Paraná. Area, 29,241 sq. m.; pop. 569,000.

Enzeli. See PAHLEVI.

Eperies. See PRESOV.

Epernay (*ä-per-nä'*), tn., Marne, France, on R. Marne; centre of champagne industry; rly. workshops. Pop. 19,000.

Epinal (*ä-pê-näl'*), chief tn., Vosges, France; fortress; cotton, weaving, and printing; embroidery, hats; has library with many valuable old mss. Pop. 22,000.

Epping, mkt. tn., Essex, England, 17 m. N.N.E. of London, on N. outskirts of Epping Forest; 5,600 ac. of forest

preserved by City of London and open to public. Pop. 5,000.

Epsom, mkt. tn., Surrey, England, 15 m. s.s.w. of London; medicinal springs. Epsom Downs have famous racecourse, where 'Derby' and 'Oaks' are run. Pop. 27,100.

Erfurt (*er'foort*), tn., Saxony, Prussia, on R. Gera, 65 m. s.w. of Leipzig; famous cathedral; flower seeds, flowers, and vegetables; dress stuffs; machinery; chemicals; brewing and dyeing. Pop. 136,000.

Er'icht, Loch, lake between Perthshire and Inverness-shire, Scotland; well stocked with trout; length, 14 m. Dam in connection with hydro-electric scheme, where R. Ericht leaves the loch.

Erie (*ë'ri*). (1) Lake, N. America; one of the Great Lakes separating Canada from U.S.A.; length, 240 m.; breadth, 30 m. to 58 m.; area, 10,000 sq. m.; alt., 573 ft. (2) Canal, New York, U.S.A., connects L. Erie with Hudson R.; length, 340 m.; breadth, 150 ft.; depth, 12 ft. (3) City, Pennsylvania, U.S.A., on L. Erie; fine harbour; ironworks; machinery; asbestos products. Pop. 116,000.

Er'ith, tn., Kent, England, 5 m. E. of Woolwich; coal port; engineering and gun factories; gunpowder, oil, glue, and manure works. Pop. 32,800.

Eritrea (*ä-rë-trä'a*), Ital. colony on Red Sea, Africa; coast-line is c. 670 m. long, of coral formation, and with many islands. Interior consists of two regions—in N., part of Abyssinian plateau; in S., part of Afar country, large tracts of plain, mostly arid and often forming jungle of mimosa trees; principal rivs. enter salt basins. Water is scarce. Climate varies; on the coast, excessive heat; in valley-lands, more temperate; on plateau, cool. Good pearl fisheries; flax, tobacco, cereals, cotton; gold near Asmara. Inhabitants are largely nomadic, with flocks of sheep, cattle, camels, donkeys. Chief tns., Asmara (cap.) and Massawa. Area, 45,754 sq. m.; pop. 400,000.

Erivan'. (1) District, Armenia,

U.S.S.R., an elevated plain culminating in an extinct volcano, Alagöz (13,436 ft.); agriculture; famed for apricots and melons, and vineyards. Area, 1,985 sq. m.; pop. 176,000. (2) Cap. of above and of Armenia; machinery, wine, brandy, glycerine. Pop. 66,000.

Erlangen, tn., Bavaria, Germany, 11 m. N.W. of Nuremberg; breweries; manufactures electrical apparatus, gloves, paper, brushes. Pop. 30,000.

Erlau. See EGER.

Ermeland', region, E. Prussia, Germany, s. of Königsberg; centre of flax growing. Area, 1,650 sq. m.; pop. c. 240,000.

Ermelo', tn. and dist., Transvaal, S. Africa, 120 m. E.S.E. of Johannesburg; coal, gold; mealies. Pop. (tn.) 4,500.

Erne (ern). (1) Riv., Ireland; passes through two lakes of same name; enters Donegal Bay; cataract near mouth; length, c. 72 m. (2) UPPER LOUGH ERNE, shallow lake, Fermanagh, N. Ireland; rugged shores; numerous islets, 13 m. long. (3) LOWER LOUGH ERNE, lake, Fermanagh, N. Ireland, studded with islets; salmon and trout fishing; 18 m. long.

Erode, tn., Madras, India, on r. bk. of R. Cauvery; trade centre; cotton. Pop. 23,000.

Erzerum (erds-room'). (1) Turkish vilayet, E. Asia Minor, formerly partly Armenian, occupying centre of the Armenian plateau, and containing sources of R. Euphrates, Choruk, and Aras (Araxes); agricultural and forest country, with iron, saline, and sulphur springs, salt, and lignite. Area, 19,600 sq. m.; pop. 270,000. (2) Tn., in above, at E. end of plain watered by R. Kara-Su (W. Euphrates), 6,000 ft. above the sea and frequently snow-bound for six months in the year; horse-shoes, brasswork; salt works, tanneries. Pop. 78,000.

Erzgebirge (erts'ge-bir-gi), ('ore mountain'), mt. range between German Saxony and Bohemia (Czechoslovakia); highest peaks, Keilberg (4,062 ft.), Fichtelberg (3,950 ft.),

Spitzberg (3,650 ft.); rich in minerals—tin, silver, lead, iron, copper; popular for winter sports.

Erzinjan', anc. tn. of Armenia, 85 m. S. of Trebizond and W. of Erzerum, situated 3,900 ft. above the sea; manufactures silk, cotton, and copper articles. Pop. 52,000.

Esbjerg (es'byerg), port, W. Jutland, Denmark; exports cattle, butter, bacon, fish, and eggs. Pop. 24,000.

Escanaba, city, Michigan, U.S.A.; shipping port of Lake Superior iron region; railway workshops; lumber products, chemicals. Pop. 13,200.

Eschwege (esh'wi-gi), tn., Hesse-Nassau, Prussia, on R. Werra, 28 m. S.E. of Cassel; textiles; tobacco factories; tanneries. Pop. 12,500.

Eschweiler (esh'vi-ler), tn., Rhineland, Prussia, 8 m. E.N.E. of Aachen; coal-mining and iron-working centre; zinc works; brewing. Pop. 26,000.

Esher and The Dittons, urb. dist., Surrey, England, on R. Mole; residential tn., part of Greater London; Sandown Park racecourse near by; associations with Cardinal Wolsey and Clive. Pop. 17,100.

Eshowe (esh-ō'wad), magisterial div., Zululand, Natal, S. Africa, 30 m. N. of mouth of Tugela R.; agricultural. Area, 736 sq. m.; pop. 34,000. Chief centre, Eshowe; asbestos mines.

Esk, four rivs., Scotland. (1) NORTH Esk, Angus; flows into North Sea; salmon and trout fishing; length, 29 m. (2) SOUTH Esk, Angus; flows into North Sea at Montrose; salmon and trout; length, 48 m. (3) Riv. formed by union of NORTH Esk and SOUTH Esk at Dalkeith, Midlothian; enters Firth of Forth at Musselburgh. (4) Riv. formed by union of BLACK Esk and WHITE Esk near Langholm; flows into Solway Firth near Gretna; salmon and trout fishing; length, 37 m.

Eskilstuna (esh'il-stoo-na), tn., Södermanland, Sweden, between Ls. Hjelmar and Malar; iron and steel industries; engineering. Pop. 31,000.

Eski-Shehr (es'ki-shār), ('old town'), tn. and vilayet, Turkey, Asia Minor,

130 m. w. of Angora; rly. centre; meerscham; cereals, wool, hair. Pop. (vilayet) 154,000.

Esmeraldas, maritime prov., Ecuador, S. America; traversed by riv. of same name; cap. Esmeraldas, port, and centre of cacao and tobacco dist.; gold. Area, 5,465 sq. m.; pop. 20,000.

Esna, tn. on l. bk. of R. Nile, Upper Egypt; barrage here; caravan centre; pottery. Pop. 16,000.

Espinal, tn., Colombia, S. America, 75 m. s.w. of Bogota; tobacco plantations and pottery works. Pop. 10,000.

Espirito Santo, mar. state, Brazil, S. America; surface flat in n., forested and mountainous in s.; sugar, cotton, coffee, cocoa, tobacco, and tropical fruits; cap. Victoria, 270 m. n.e. of Rio de Janeiro. Area, 17,248 sq. m.; pop. 587,500.

Esquimalt (*es-kuw'mawlt*), naval station, Vancouver I., Canada, adjoining Victoria; has naval yard and dry dock; salmon cannery. Pop. 5,000.

Eseeg. See OSJEK.

Essen, tn., Rhineland, Prussia; centre of Ruhr coalfield; large iron and steel works (including Krupp's); agricultural machinery, locomotives, cash registers; textiles, cigars; breweries; great rly. centre. Pop. 470,500.

Esequeibo (*es-é-ké'bô*), riv., Brit. Guiana, S. America; length, c. 600 m.; navigable 40 m.

Essex, mar. co., England, having on n. Cambridgeshire and Suffolk, on e. North Sea, on s. R. Thames, on w. Middlesex and Herts; long, flat coastline with shallow bays, occasionally fringed with marshland; inland, surface undulating, wooded; land sometimes inundated; contains Epping Forest. Chief rivs., Thames, Stour, Lea, Colne, Blackwater, and Roding; great grain-producing county; important oyster fishing. Industries include powder works and breweries; important docks at Tilbury and Plaistow; Harwich has great continental traffic; co. manufactures agricultural implements and silk. Largest tns. are part of Greater London (East Ham, West Ham, Leyton, Walthamstow);

other tns., Chelmsford (co. tn.), Southend, Colchester. Area, 1,530 sq. m.; pop. 1,755,200.

Esslingen (*es-ling-en*), tn., Württemberg, Germany, 9 m. s.e. of Stuttgart; famed for wines and fruit; manufactures include machinery and cottons. Pop. 41,000.

Estepena (*és-té-pô'na*), tn. and port, Malaga, s. Spain; fishing centre; fruit exported. Pop. 10,000.

Es'ton, urb. dist., N. Riding, Yorks, England, at foot of Cleveland Hills, 4 m. s.e. of Middlesbrough; blast furnaces, iron foundries, and ironstone quarries. Pop. 31,100.

Esto'nia, republic on e. shore of Baltic Sea, s. of Gulf of Finland; bounded by Russia on e. and Latvia on s.; surface flat; agriculture and dairy farming; chief crops, rye, oats, barley, potatoes; forests; produces textiles, cement, oil shale, matches, leather. Inhabitants mainly of Finnish race and Protestant. Cap. Tallinn. Area, 18,354 sq. m.; pop. 1,116,500.

Estra'da, LA, tn., Galicia, n.w. Spain, 18 m. n.n.e. of Pontevedra; agriculture, stock rearing; linen and paper manufactures. Pop. 25,000.

Estremadura (*es-trá-ma-doo'ra*) ('Land's End'). (1) Atlantic prov., Portugal; embraces dists. of Leiria, Lisbon, and Santarem; products, fruit, wine, fish, salt, fine lace. Area, 6,937 sq. m.; pop. 1,304,000. (2) Former prov. of w. Spain, divided into modern provs. of Badajoz and Caceres.

Es'tergom, formerly GRAN, tn., Hungary, on e. bk. of R. Danube; mineral springs; cloth weaving, wine; cathedral; former cap. of Hungary. Pop. c. 20,000.

Etaples (*é-tap'*), port and wat.-pl., Pas-de-Calais, France, 17 m. by rail s. of Boulogne; Brit. base hospitals in vicinity during Great War.

Ethiopia (*é-thé-ó-pe-a*), ('land of the swarthy-faced'), name given by the ancients to an extensive tract of country on both sides of the Upper Nile. It corresponds to the modern

Nubia and Abyssinia. The cap. was Meroë, which was one of the principal trade centres of the anc. world.

Et'na, volcano, Sicily; height, c. 10,760 ft.; summit generally under snow; middle slopes wooded; soil at base fertile, producing fruits and vegetables; observatory situated c. 1,000 ft. below summit; last eruption 1928.

E'ton, tn., Bucks, England, on l. bk. of R. Thames, opposite Windsor; famous for college founded by Henry vi. (1440); beautiful old buildings, including quadrangles and chapel. Pop. 2,000.

Etruria (*et-roo're-a*), dist. of anc. Italy, probably including in early times N. Italy, between Alps and Tiber, but later reduced to dist. bounded by R. Arno, Apennine Mts., and R. Tiber. Formerly populated by Etruscans, a powerful people of whose history little is known.

Et'rick, riv., Selkirkshire, Scotland; rises in Capel Fell; flows N.E. to join Tweed, N.E. of Selkirk; chief trib., Yarrow. Length, 32 m.

Euboea (*ü-bö'a*), largest isl. Grecian Archipelago; separated from E. mainland by channel, N.W. part of which was anciently called Euboean Sea and narrowest part Euripus (c. 120 ft., and spanned by bridge). E. coast is steep and rocky, w. sloping gradually; interior wooded, fertile, mountainous; hot springs in N.; iron, coal, and marble in S. Principal products—corn, oil, and wine; minerals—black marble, lignite, and chrome ores. People mostly Greeks and Albanians. Chief tns., Carystos and Chalcis. Area, 1,460 sq. m.; pop. 154,000.

Euganean Hills (*u-gä'-ni-an*), volcanic hills, Lombardy, N. Italy, S.W. of Padua; several watering-places on slopes.

Eupato'ria, port, Crimean Rep., U.S.S.R.; machinery, chemicals, dried fish; exports cereals, salt. Pop. 23,000.

Eugen (*oi'pen*), tn., Belgium, 10 m. S. of Aachen; cloth and woollen in-

dustries; dye works; yarn-spinning mills. Ceded to Belgium after Great War. Pop. 13,500.

Euphrates (*ü-frä'tez*), largest riv. in W. Asia, called in O.T. 'the river' (Exod. 23: 31) and 'the great river' (Deut. 1: 7). Source, in Anatolia, consists of two branches, Kara-Su and Murad-Su; flows through mountainous region of Taurus; enters Syria, and at Abu Kamal flows into Iraq; is joined by R. Tigris at Kurna; united riv. called Shatt-al-Arab. Riv. in middle and lower courses flows through plains, deserts, and swamps, sparsely cultivated. In anc. times rich cultivated plain well watered by canals. Near Basra quantities of dates and rice are grown. Banks of riv. teem with anc. remains representing all periods; site of Babylon. Great floods take place, due to melting snows on mts. of upper course. Length, c. 1,800 m.; breadth varies greatly.

Eura'sia, name formed from Europe and Asia, applied to the great continental land mass which these two form.

Eure, dep., N. France; surface consists of plateaus with fertile valleys; drained by Rs. Eure and Seine; agriculture, orchards, stock raising; textiles; cap. Evreux. Area, 2,330 sq. m.; pop. 308,000.

Eure-et-Loir (*ür-d-lwar*), dep., France, S. of Eure; flat in E.; W. hilly and forested; drained by Rs. Eure and Loir; granary of Seine basin; flour mills, textile factories, ironworks, cotton and paper mills. Cap. Chartres. Area, 2,291 sq. m.; pop. 255,000.

Eure'ka, tn., N. California, U.S.A., on Humboldt Bay; redwood lumber. Pop. 19,000.

Eur'ope, most W. and smallest continent of Old World. Extreme length (from Nordkyn on N. to S. of Greece) about 2,400 m., extreme width about 3,000 m. Bounded on N. by Arctic Ocean; E. by Ural Mts., Ural R., and Caspian Sea; S. by Caucasus Mts., Black Sea, Sea of Marmara, Aegean Sea, and Mediterranean Sea; W. by

Atlantic Ocean. Coast-line, about 48,000 m. in extent, is very much broken. It throws out the great south-pointing peninsulas of Scandinavia on the n., Iberian Peninsula, Italy, Balkans and Crimea on s., and north-pointing peninsula of Jutland. Brit. Isles are separated from mainland by the English Channel and North Sea, Iceland by Atlantic Ocean, Novaya Zemlya, Spitsbergen, etc., by Arctic Ocean. Except in Russia, no place is more than 300 m. from the sea. In s. traffic is interrupted in winter by the freezing of seas and waterways. Principal mts. radiate from the Alps. A great w. loop passes through the Apennines of Italy, Atlas of N. Africa, into Spain as the Sierra Nevada, and with the Pyrenees, a short branch, probably rejoins the Alps. To the e. the great Carpathian fold encircles the Hungarian plain before passing into the Balkan peninsula as the Balkan Mts., and by the Crimea into the Caucasus. Another fold, the Dinaric Alps, forms e. boundary of Adriatic Sea, becomes the Pinus range in Greece, and passes into Asia Minor. N. of this great system are the dissected plateaus of Spain, France, Bohemia, Scandinavia, and N. Scotland. About two-thirds of surface is a plain, of which greater part is under 600 ft. above sea-level. It begins in s. of England and extends through n. and e. of France, N.E. to tundras along Arctic Ocean, E. and S.E. to Caspian and Black Seas; along R. Danube, encircled by the Alps, Carpathians, and Balkans, are the plains of Hungary and Walachia. A considerable area around n. end of Caspian Sea is below sea-level. The Alps and Valdai Hills are the principal watersheds; from the former flow the Rs. Rhine (to North Sea), Rhone, Po, and Adige (to Mediterranean), and the Danube (to Black Sea); from the latter the N. Dvina (to White Sea), Volga (to Caspian), Don and Dnieper (to Black Sea), S. Dvina and Niemen (to Baltic).

Owing to Atlantic Drift Current

along n.w., and the large amount of inland water, Europe has a more temperate yet more varied climate than any other continent. Extreme n. is arctic, the sheltered Mediterranean district sub-tropical. The s.w. winds bring abundant moisture and heat; nowhere is agriculture impossible owing to drought except in s.e. and in interior of Spain. As a rule, rainfall decreases and range of temperature increases from w. to e.

Flora and fauna vary from sub-arctic to sub-tropical. Indigenous animals include bear, wolf, elk, chamois, many species of deer, foxes, hares, and rabbits. The North Sea provides a valuable fishing ground for herring, cod, and mackerel, while tunny fishing is an important Mediterranean industry. Of native trees, fir, oak, apple, pear, and cherry are the most common. Central regions produce timber, fibres, cereals, and hardier fruits, the s. sub-tropical fruits, the n. the hardier cereals; good pasture in all parts.

The precious metals are not found in abundance, but there are rich veins of coal (chiefly in Britain, Belgium, France, Germany), iron (the same, with Sweden and Spain), copper (Sweden and Spain), lead (Spain), zinc (Germany), mercury (Spain and Austria), sulphur (Sicily), salt (Poland and England), and petroleum (Russia, Romania). Area, 3,750,000 sq. m. Pop. c. 500,000,000.

Euskirchen (ois'kirch-en), tn., Rhineland, Prussia, 10 m. w. of Bonn; cloth mills, tanneries, sugar and metal-ware factories. Pop. 15,000.

Euxina. See BLACK SEA.

Ev'anston, city, Illinois, U.S.A., on shore of Lake Michigan; residential suburb of Chicago. Pop. 62,000.

Ev'ansville, city, s.w. Indiana, U.S.A., on Ohio R.; one of largest hardwood markets in the world; coal mining; motor-cars, refrigerators, gas engines, agricultural implements. Pop. 103,000.

Ev'crest, MOUNT, peak, Himalayas, on frontiers of Nepal and Tibet, India;

highest measured mountain in world (over 29,000 ft.). Several climbing expeditions in recent years. In 1924 highest camp, 27,000 ft.; Messrs. Mallory and Irvine last seen at altitude reckoned by theodolite as 28,200 ft.

Everett, (1) City, Massachusetts, U.S.A., a residential suburb of Boston; manufactures iron, steel, coke, and petroleum products. Pop. 48,000. (2) City, Washington, U.S.A., on Puget Sound; sawmills, iron smelting; canning of fish, fruit, and vegetables. Pop. 30,000.

Everglades, swamp (140 m. by 50 m.) occupying most of s. portion of Florida peninsula, U.S.A.; contains Lake Okeechobee and numerous sluggish waterways. Now being drained.

Evesham, munic. bor. and mkt. tn., Worcestershire, England, on R. Avon, in Vale of Evesham; summer resort; orchards; market gardens; jam factories. Pop. 8,800.

Evora, tn., archiepisc. see, cap. of dist. of Evora, Portugal, 72 m. E.S.E. of Lisbon; agricultural centre; copper and iron mines in vicinity. Pop. 16,000.

Evreux (*ā-vroo*), tn., episc. see, cap. of Eure dept., France, 30 m. s. of Rouen; iron foundries and glass works. Pop. 15,000.

Ewell, par. and tn., Surrey, England, 1½ m. N.E. of Epsom; residential

town; pottery, brick and tile works. Pop. (par.) 4,200.

Exe, riv., England, flows through Somerset and Devon; enters Eng. Channel; trout fishing; navigable estuary; length, 54 m.

Exeter, co. tn., Devonshire, England, on R. Exe. Anc. city, believed to have been occupied by the Romans; famous cathedral. Manufactures agricultural implements, paper; brewing, ironfounding; important rly. centre. Exeter Ship Canal connects Exeter with estuary of riv. Pop. 66,000.

Exmoor, high moorland on borders of Somerset and N. Devon, England; ponies, sheep, deer.

Exmouth, urb. dist., mkt. tn., and port, Devonshire, England, 10 m. S.S.E. of Exeter; fishing, brick making, and manufacture of Honiton lace. Pop. 14,600.

Eye (*ī*), munic. bor. and mkt. tn., Suffolk, England, 20 m. N. of Ipswich; brewing and iron works. Pop. 1,700.

Eyemouth (*ī'mouth*), police burgh, Berwickshire, Scotland, at mouth of R. Eye, 8 m. N. by w. of Berwick; important fishing centre. Pop. 2,200.

Eyre (*īr*), LAKE, salt lake, S. Australia; in sandy waste known as 'Dead Heart of Australia'; in wet season fed by Warburton riv. and Cooper's Creek, in dry season a swamp; 38 ft. below sea-level.

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Fabriano (*fā-ri-ā'nō*), tn. and episc. see, Marches, Italy, 35 m. S.W. of Ancona; famous in 14th cent. for school of painting; paper mills. Pop. 25,200.

Facatativa (*fā'-kā-tā-tē'vā*), tn., Colombia, S. America, c. 20 m. N.W. of Bogota; in neighbourhood are interesting Indian carved stones; alt. 8,480 ft. Pop. c. 12,000.

Faenza (*fā-en'sā*), tn. and episc. see, Emilia, Italy, 31 m. S.E. of Bologna;

famous for glazed and painted pottery (*faience*); silk manufactures. Pop. 22,400.

Faeroes, THE ('sheep islands') (*fā'rōs*), group of islands, North Sea, between Iceland and Shetland; belong to Denmark; 21 islands, of which 17 are inhabited; high and rugged, with broad inland terraces with sharp-pointed peaks (highest, 2,894 ft.); currents are dangerous, and storms frequent; chief industries are sheep

farming, fishing, and wild-fowling. Cap. Thorshavn, in Strömö. Area, 540 sq. m.; pop. 22,800.

Falls'worth, urban dist., 4 m. N.E. of Manchester, Lancashire, England; cotton spinning, silk weaving, hat manufacture. Pop. 15,700.

Fair Head, rocky promontory, N. Ireland, in N. of co. Antrim; 636 ft. high.

Fair Isle ('sheep island'), rocky isl., Shetland, Scotland; 3 m. long by 2 m. broad; fishing and woollen hosiery.

Faiyum, El (fi-yoom'), prov., Egypt; fertile and well-watered by canals (especially Bahr Yusuf); in N. is L. Birket-el-Kerun; principal prods., fruit, cereals, rice, cotton, attar of roses. Area, c. 670 sq. m.; pop. 554,000. Chief tn., Medinet-el-Faiyum, 57 m. S.S.W. of Cairo (pop. 53,000).

Faizabad (fi-a-bad'). (1) Cap. of Badakhshan, N.E. Afghanistan; is the chief cantonment for E. Afghanistan. (2) See FYZABAD.

Fa'kenham, par. and mkt. tn., Norfolk, England, 19 m. N.E. of King's Lynn. Pop. (par.) 3,000.

Palaise (fa-lâs'), tn., Calvados, N. France, 20 m. S. of Caen; birthplace of William the Conqueror; cotton manufactures. Pop. 5,300.

Falkenstein (fal'ken-stin), tn., Saxony, Germany, 35 m. S.W. of Chemnitz; cotton goods, lace, window blinds; topazes found in neighbourhood. Pop. 16,000.

Falkirk (fawl'hirk), mkt. tn. and munic. burgh, Stirlingshire, Scotland; centre of agricultural and coal mining dist.; Carron, Falkirk, and Camelon ironworks, dating from 17th cent., now famous for fire-grates and stoves; other industries are brewing, distilling, brick and tile making, chemical manufactures. Pop. 36,600.

Falkland (fawl'land), tn. and royal burgh, Fife, Scotland, 8 m. S.W. of Cupar; linen and floorcloth manufactures; anc. palace. Pop. 800.

Falkland Islands, British Crown Colony in S. Atlantic, 300 m. E. of

Magellan Straits, consisting of E. Falkland (2,580 sq. m.), W. Falkland (2,038 sq. m.), and dependencies of S. Georgia (c. 1,000 sq. m.), S. Orkneys, S. Shetlands, Graham Land, Sandwich group; includes over 100 small islands. Coast is irregular, with many excellent harbours; many small rivers and lakes; climate bleak but healthy. Chief industry is sheep rearing; coaling station; wool, hides, tallow, whale oil exported. The islands are now the seat of the largest whaling business in the world. During the Great War naval battle of Falkland Islands (Dec. 1914) gave the Allies control of ocean trade routes. Cap. Stanley (E. Falkland). Total pop. c. 4,000.

Fall River, city and port, Massachusetts, U.S.A., 50 m. S. of Boston; has the most extensive cotton manufacture of U.S.A.; other industries are dyeing, brewing, ironfounding, oil refining, manufacture of machinery and silk; unrivalled facilities of water power and water transportation; line of steamers, the favourite means of travel between Boston and New York. Pop. 115,000.

Fal'mouth, munic. bor., seapt. and popular wat.-pl., Cornwall, England; fine harbour; docks and building yards; has important coasting trade and fishing industry. Pop. 13,500.

Fal'ster, Danish isl., Baltic Sea; is very fertile; agriculture, fruit-growing, dairying; 30 m. long, 2-13 m. broad; chief town, Nykjøbing.

Fal'un (fä'loon), tn., Kopparberg, Sweden, c. 150 m. N.W. of Stockholm; celebrated copper mine, worked since 13th cent.; iron, steel, wood pulp. Pop. 14,000.

Famagusta (fä-mä-goo'sta), seapt., Cyprus; exports wines, fruit, cotton, and potatoes; good harbour. Pop. 7,000.

Fanning Island, coral atoll, Pacific Ocean, near equator; is a station on Pacific cable route from Vancouver to Australia; guano and mother-of-pearl. Area, 15 sq. m.; pop. c. 400.

Fä'no, tn., episc. see, and seaside

resort, on Adriatic Sea, N. of Ancona, Italy; has Roman remains; first printing press with movable Arabic type was established here by Pope Julius II. (1514). Pop. (tn.) 12,000.

Far Eastern Area, Asiatic province of U.S.S.R., in N.E. Asia, stretching from the borders of Mongolia and Manchuria northwards to the Arctic Ocean, and bounded on the W. by the Yakutsk and Buriat-Mongol Soviet Republics. N. part of the island of Sakhalin included in the province. Area as yet little developed. Climate is very varied, the extreme north-eastern part lying within the Arctic belt. A great part of the area is mountainous, and in the Kamchatka peninsula there are volcanoes. The greater part is forest, and timber is one of the chief exports; furs form an important export of the region. Agricultural products, chiefly from the Amur district, include rice, cereals, soya beans, and fruits. Chief minerals are coal, gold, silver, zinc, lead, and iron. Chief tns., Vladivostok, Blagoveshchensk, Khabarovsk, and Chita. Area, c. 1,138,259 sq. m. Pop. c. 1,843,000.

Fareham, mkt. tn., Hampshire, England, on Portsmouth Harbour; flour milling, tanning, earthenware. Pop. 11,600.

Far'go, city, N. Dakota, U.S.A., on Red River; large trade in grain and agricultural machinery; oil, flax, and flour mills. Pop. 29,000.

Fariškot'. (1) Sikh state, Punjab, India; surface level; fertile in E.; sandy in W. Area, 643 sq. m.; pop. 151,000. (2) Chief tn. of above, 65 m. S.W. of Amritsar; large grain trade. Pop. c. 12,000.

Farišpur'. (1) Dist., Bengal, India, in Ganges delta; fertile; rice, jute, sugar-cane. Area, 2,371 sq. m.; pop. 2,250,000. (2) Chief tn. of above, 120 m. N.E. of Calcutta; cloth and carpet weaving; brick making and oil pressing. Pop. 14,500.

Far'ington, GREAT, mkt. tn., par., Berkshire, England, 10 m. N.W. of London; centre of agricultural district; anc. church. Pop. (par.) 2,700.

Far'lington, par. and vil., Hants, England, on Langston Harbour, 43 m. N.E. of Portsmouth; reservoirs for Portsmouth dist. Pop. (par.) 2,000.

Farn'borough. (1) Urban dist., Hampshire, England; the parish includes Aldershot North Camp, and is a training centre for the Tank Corps and the Royal Air Force. Pop. 16,400. (2) Par. and vil., Kent, England, 4 m. S.E. of Bromley. Pop. (par.) 3,300.

Farne (or FERNE) Islands, group of 17 islands off Northumberland, England; naked basaltic rocks; dangerous to shipping; associated with heroism of Grace Darling. Area, 80 ac.

Farn'ham, urb. dist. and mkt. tn., Surrey, England, on R. Wey; residential town close to Aldershot camp; excellent hops grown. Pop. 18,300.

Farn'worth, tn., Lancashire, England; adjoins Bolton; cotton spinning and manufacture; machine and engineering works; coal mining. Pop. 28,700.

Faro (fā'rō). (1) Dist., s. Portugal; narrow, sandy coast strip; N. part of dist. mountainous; fruit, wine, fish. Area, 1,937 sq. m.; pop. 268,500. (2) Seapt., cap. of above; exports wine, fruit, cork, and baskets. Pop. 13,000.

Faroe (or FAEROE) Islands. See FAEROES, THE.

Farrukhabad'. (1) District, United Provinces, India; flat Gangetic plain noted for high standard of cultivation; wheat, barley, maize, rice, cotton. Area, 1,683 sq. m.; pop. 857,000. (2) Chief tn. of above, on R. Ganges, 90 m. N.W. of Lucknow; manufactures gold lace, brass and copper vessels. Pop. 51,500.

Fars, province on Persian Gulf, Persia; coast low and hot; interior mountainous (7,000-10,000 ft.), with long fertile valleys; many salt lakes. Produces corn, rice, fruits, tobacco, opium; cattle and sheep reared. Cap. Shiraz; Bushire is principal port. Area (est.) 60,000 sq. m.; pop. (est.) 750,000.

Fars'ley, urb. dist., W. Riding, Yorkshire, England, 4 m. N.E. of

Bradford; manufactures woollens and cloth. Pop. 6,200.

Fasā', tn., Fars, Persia, 180 m. E. of Bushire; silk, woollen, and cotton manufactures. Pop. c. 10,000.

Fasbo'da. See KODOK.

Fast'net Rock, islet off S.W. coast of CO. Cork, I.F.S.; lighthouse, with revolving light visible 18 m.

Fatehpur'. (1) Cap. of dist. of same name, United Provs., India, c. 70 m. N.W. of Allahabad; has trade in hides and grain; two fine mosques. Pop. 15,000. Area, dist., 1,642 sq. m.; pop. 652,500. (2) Fort. and residential tn., Rajputana, India; third largest town in state. Pop. c. 17,000.

Fatehpur' Sikri, tn., United Provs., India, 23 m. W. of Agra; former cap. of Mogul Empire, founded by Akbar (1570), now in ruins; modern town lies S.W. of anc. city. Pop. 5,500.

Fauld'house, par. and vil., W. Lothian, Scotland, 6 m. W. of W. Calder; coal and iron mines. Pop. 4,100.

Favā'ra, tn., Sicily, 4 m. E. of Girgenti; sulphur, alum, tourmaline and marble; 13th cent. château. Pop. 21,500.

Faversham, mkt. tn. and seapt., N. Kent, England; has brewing, shipbuilding, oyster fishing, trade in timber, coal, and hops; manufactures bricks and gunpowder. Pop. 10,100.

Fawley, vil., Hants, England, on Southampton Water, 5½ m. S.S.E. of Southampton. Pop. 2,000.

Fayal (fā-āl'), one of the Azores islands; exports fruit. Chief tn., Horta. Pop. 19,000.

Fayum. See FAIYUM.

Faasli (fā-sog'lā), dist., Anglo-Egyptian Sudan, traversed by Blue Nile; produces durra, tobacco. Gold is found. Pop. c. 500,000.

Featherstone, urb. dist., W. Riding, Yorks, England, 6 m. E. of Wakefield; has extensive coal mines. Pop. 15,000.

Fécamp (fā-kon'), port and wat.-pl., Seine-Inférieure, France, c. 25 m. N.N.E. of Havre; 'Bénédictine liqueur' is manufactured; metal founding, shipbuilding, and manufacture of

fishing nets; centre for deep-sea fishing. Pop. 16,000.

Feck'enharn, par. and vil., Worcestershire, England; 4½ m. S.W. of Redditch; manufactures needles, pins, and fish-hooks. Pop. (par.) 4,000.

Federated Malay States. See MALAY STATES.

Fehmarn (fā'marn), isl. of Prussia in Baltic Sea, between Holstein and Danish isl. of Laaland; stock raising and fishing. Chief tn., Burg. Area, c. 120 sq. m.; pop. c. 10,000.

Feilding, tn., North I., New Zealand, 85 m. N.E. of Wellington; in agricultural dist. Pop. 4,500.

Félegyháza (fā-lej-hās'ō), or KISKUN-FÉLEGYHÁZA, tn., Hungary, between rivers Danube and Tisa, 80 m. S.S.E. of Budapest; wine, fruit, tobacco, and agricultural produce. Pop. 37,000.

Felixstowe, seaside resort, Suffolk, England, at mouth of Orwell; phosphate of lime is exported. Pop. 12,000.

Fel'ling, urb. dist., Durham, England; suburb of Gateshead; has paint and drug manufactures, shipbuilding, engineering, and coal mining. Pop. 27,000.

Fel'ham, seaside vil., Sussex, England, 1 m. N.E. of Bognor; Gothic church. Pop. 2,900.

Fel'stead or **FELSTED**, par. and vil., Essex, England, 9 m. N. of Chelmsford; has anc. public school which celebrated 350th anniversary in 1914. Pop. (par.) 2,100.

Feltham, urb. dist., Middlesex, England; part of Greater London; market gardens. Pop. 16,300.

Feltre (fel'trā), tn. and episc. see, Venetia, Italy, 45 m. N.N.W. of Venice, with cathedral, a palace (now a theatre), and remains of mediæval castle; trade in silk, wine, and oil. Pop. 19,000.

Fengtien. See LIAONING.

Fenny Strat'ford, par. and mkt. tn., Buckinghamshire, England, on old Roman Watling Street, 11 m. N.W. of Dunstable. Pop. 4,300.

Fens, flat, marshy tract of land round Wash, England, embracing parts of cos. of Lincoln, Northampton, Huntingdon, Cambridge, and Norfolk. Principal rivs., Great Ouse, Witham, Welland, Nen, and Cam. Considerable areas below level of spring tides are kept from flooding by embankments 10 to 15 ft. high. Water is raised and drained into rivers by steam pumps. Most successful attempt at drainage was Earl of Bedford's (17th cent.), in dist. called Bedford Level. The whole area now forms good agricultural and grazing land.

Fen'ton. See under STROKE-UPON-TRENT.

Ferentino (*fer-en-tén'ō*), tn., episc. see, 48 m. s.e. of Rome, Italy; 12th cent. cathedral; remains of anc. wall; trade in wine and oil. Pop. (comm.) 15,500.

Ferghana (*fer-gā'na*). (1) Prov., Uzbek Republic, U.S.S.R., in valley of Sir Darya; fertile, well-watered plain, enclosed by mountains; mainly agricultural, producing large crops of grain, cotton, fruit; principal town is Khoqand. Area, c. 7,900 sq. m. (2) Tn. in above, formerly SKOBELEY or NEW MARGILAN, in Khoqand dist.; manufactures cotton. Pop. 12,000.

Fermanagh (*fer-man'a*), inland co., N. Ireland; almost divided into two parts by Upper and Lower Lough Erne; surface generally hilly and undulating, mountainous in w., well wooded, several fertile vales; large tracts only suitable for stock rearing, dairy farming; limestone, iron, and marble found; principal industry agriculture; pottery works (Belleek); manufactures of coarse linen; chief town, Enniskillen. Area, 653 sq. m.; pop. 58,000.

Fermoy, tn., Cork, I.F.S.; market for agricultural produce; salmon fishing in river Blackwater. Pop. 4,500.

Fernan'do Po, Spanish isl., w. coast of Africa, in Bight of Biafra; of volcanic origin; coast steep, inland mountainous; principal peak, Mount

Clarence (Span. *Pico de Santa Isabel*), 9,369 ft. Vegetation luxuriant; cocoa and palm oil are the chief exports. Cap. Santa Isabel. Area, 780 sq. m.; pop. 21,000.

Ferne Islands. See FARNE ISLANDS.

Fernie, tn., Brit. Columbia, Canada, 110 m. s.s.w. of Calgary; coal-mining centre. Pop. 4,500.

Ferozepore, cantonment, cap. Ferozepore dist., Punjab, India, 46 m. s.s.e. of Lahore; important centre of trade, especially in grain. Pop. 54,300. Dist. area, 4,286 sq. m.; pop. 1,098,000.

Ferrá'ra, city, archiepisc. see, cap. of Ferrara prov., N. Italy, 3½ m. s. of R. Po; cathedral and other fine churches; celebrated school of painting, 15th-16th cent.; birthplace of Ariosto, Tasso, and Guarini. Pop. 108,000.

Fer'ro, or HIERRO, most westerly of Canary Islands; in early times accounted most westerly of known lands; famous as first meridian chosen by Fr. scientists (1630). Area, 107 sq. m. Pop. 8,500.

Ferrol, city, prov. Corunna, N.W. Spain; has first-class arsenal, naval school, and modern dockyards; coal-mining station; manufactures chiefly connected with naval construction. Pop. 30,500.

Festiniog (*fest-in-i-og'*), urban dist., N. Merioneth, Wales; slate quarrying. Pop. 9,100.

Fetteres'so, coast par., Kincardine, Scotland, including part of Stonehaven; with ruins of anc. church of St. Caran and Fetteresso Castle. Pop. 5,700.

Feuerbach (*foi'er-bach*), tn., Württemberg, Germany, 2 m. N.W. of Stuttgart; manufactures chemicals. Pop. 21,000.

Fes (*fáz*), one of caps. of French Morocco; formerly cap. of Moorish kingdom; celebrated for centuries as a holy city; is surrounded by walls; has many fine mosques, univ., and the sultan's palace; commercial centre; active caravan trade; manufactures woollen, silk, and leather goods, gold

and silver ware, carpets, olive oil. Pop. 81,500.

Fozzan, Saharan prov., Italian Libya, Africa; barren plateaus; shallow valleys with fertile oases where grain, vegetables, and the principal food, dates, are grown; gentle slope to n.; climate very dry, but healthy, except for malaria; soda, obtained from salt lakes in n.w., only export trade. Cap. Murzuq. Pop. c. 65,000.

Fichtelgebirge (*fich'tel-ge-bir'gi*), mt. group, Bavaria, Germany; highest peak, Schneeberg (3,450 ft.); stretches from Bayreuth to frontier of Bohemia; great mineral wealth (iron, copper, lead); granite and marble quarries.

Ficksburg, tn., Orange Free State, S. Africa, 100 m. E.N.E. of Bloemfontein; centre of fine agricultural and stock-raising region; extensive trade. Pop. 3,500.

Fiesole (*fē-sō-lā*), tn. and episc. see, Italy, 3 m. N.E. of Florence; fine 11th cent. Tuscan-Roman cathedral and Etruscan and Roman remains; Fra Angelico was for a time prior of the Dominican convent; straw plaiting. Pop. (com.) 10,000.

Fife, mar. co. of E. Scotland, bounded on n. by Firth of Tay, s. by Firth of Forth. Co. is succession of undulating hills and small valleys. Highest hills are E. and W. Lomonds. Coal is extensively mined, and the co. is famous for linen (esp. Dunfermline) and linoleum (Kirkcaldy). Industries include iron founding, machine making, shipbuilding, distilling, brick and tile making, paper making, beet sugar manufacture, oilcake milling, aluminium production; and shipping and fishing are largely carried on. Chief ports, Kirkcaldy, Burntisland, and Methil. Agriculture is very highly developed, flax being largely grown. Historic centres are Dunfermline and St. Andrews; numerous popular watering-places and golf links. Co. tn., Cupar. Area, 504 sq. m.; pop. 276,300.

Figig, a walled oasis in s.e. Morocco; caravan rendezvous; contains about 200,000 date palms.

Figueras (*fē-gūr'as*), tn., Catalonia, N.E. Spain, 20 m. N. of Gerona; prominent in Peninsular War; cork, glass, soap, leather, and wine manufactures. Pop. 13,500.

Fiji (*fē'jē*), archipelago in Pacific Ocean, N. of New Zealand; about 250 islands, of which some 80 are inhabited, forming a British crown colony. Principal islands, Viti Levu, Vanua Levu, and Taviumi; larger islands of volcanic formation, and smaller of coral; vegetation luxuriant. Larger islands contain hills rising to 3,000 to 4,000 ft.; open, dry, undulating country, except certain rich tracts along coast of the two largest; many large rivers afford waterways to the rich lands on their banks; good climate. Exports include sugar, copra, bananas, molasses, and rubber. Vanua Batevu is a trading centre. Inhabitants of Melanesian-Polynesian stock, formerly cannibalistic and savage, are now mostly Christianized. Cap. Suva, on s.e. coast of Viti Levu. Area, 7,083 sq. m.; pop. c. 177,000.

Filey (*fē-lā*), wat.-pl., Yorks, England, 8 m. S.E. of Scarborough; consists of old town inhabited by fishermen and new town of villas and large boarding-houses; important fisheries. Pop. 3,700.

Finchley, n.w. dist. of Greater London, England, residential dist. Little now remains of Finchley Common, originally over 1,000 ac., where high-waysmen used to lurk. Pop. 59,000.

Findhorn, salmon and trout river, Scotland. Rising in the Monadhliath Mts., it flows through counties of Inverness, Nairn, and Moray, entering the Moray Firth at the fishing village of the same name. Length, 70 m.

Findlay, city, Ohio, U.S.A., 42 m. S. of Toledo; situated in oil and natural gas region; manufactures include machinery, glass, and rubber tyres. Pop. 17,000.

Finedon (*fin'don*), urb. dist., Northants, England, 3 m. N. of Willingbrough; iron ore. Pop. 4,100.

Finig's Cave. See STAFFA.

Finistère (*fē-nēs-tār*), dep., N.W.

France; three peninsulas project to w.; very fertile; cereals, vegetables, fruit; flax; horses and cattle extensively reared; coal, granite, slate; important fisheries. Cap. Quimper. Area, 2,729 sq. m.; pop. 754,000.

Finland, rep., Europe; bounded on n. by Norway, w. by Sweden and Gulf of Bothnia, s. by Gulf of Finland, e. by Russia; includes large part of Lapland, with access to Arctic Ocean; coast much indented, and many small islands; interior contains wide expanses of forest, swamps, and innumerable lakes. Lake Saima, with natural outlet over Imatra Falls (finest in Europe), is the largest which is wholly in Finland; connected by canal (36 m.) with Gulf of Finland; highest mt., Haldefjall (4,126 ft.); principal rivers, Muonio, Kemi, Uleå, Kymmene. Climate is healthy; severely cold in winter, snow lying from Nov. to April; arctic in Lapland; summer hot and dry. Much pasture-land; chief crops, hay, oats, rye, barley, and potatoes. Wood is made into pulp for paper mills; granite of excellent quality is quarried. Important industries comprise iron and mechanical works, textiles, wood industries, paper, dairy produce, leather, chemicals. Principal towns are Helsinki (cap.), Turku, Tampere, Viipuri, Vaasa, Oulu. Area, 149,588 sq. m.; pop. c. 3,611,000.

Finland, GULF OF, shallow arm of Baltic Sea. Lakes Ladoga and Onega drain into it, hence water is but slightly salt; length, 260 m.

Finmark, most northerly prefecture of Norway; treeless, unsheltered plateau; alt., 1,600 ft.; is inhabited by nomadic Lapps; whale fisheries; cod-liver oil; potatoes and barley. Area, 18,591 sq. m.; pop. 44,500.

Finsbury, parl. and metropolitan bor., London, England; industries include tobacco manufacture, printing, and the making of optical glass. Pop. 69,900.

Finsteraarhorn (*fin-ster-är'horn*), loftiest summit (14,026 ft.) of Bernese Oberland Alps, Switzerland.

Firminy (*fēr-mē-nē'*), tn., Loire, France, 8 m. s.w. of St. Etienne; coal-field in vicinity; manufactures iron and steel goods. Pop. 18,500.

Fishguard, town, Pembrokeshire, Wales, at head of deep and sheltered bay; extensive harbour for G.W.R. route to Ireland (Rosslare, Wexford, 55 m.); large brickworks at Goodwick (twin town, pop. 2,300). Pop. 3,000.

Fitchburg, city, Massachusetts, U.S.A., 45 m. w.n.w. of Boston; woollens, cotton, paper, and machinery. Pop. 41,000.

Fiume (*fē-oo mē*), Ital. seapt. at head of Gulf of Quarnero, on the Adriatic, 70 m. by rail s.e. of Trieste, formerly chief port of Hungary; now cap. of the 'Free Zone of the Carnaro'; industrial suburb and harbour of Sushak is in Yugoslavia; principal buildings, cathedral and governor's palace; three harbours; exports include wood, rice, sugar, and petrol. Pop. of Fiume, 49,000, including Italians (22,000), and Croats or Southern Slavs, Magyars, and inhabitants of various nationalities.

Five Towns, name given to chief tns. in the Potteries, now amalgamated. See STOKES-UPON-TRENT.

Flam'borough Head, cape, Yorks, England, 18 m. s.e. of Scarborough, sheltering Bridlington Bay on n.; chalk cliff; lighthouse; between Head and Bridlington is old Brit. earthwork known as Dane's Dyke.

Flanders, the land of the Flemings, former name for modern Belgian provinces of E. and W. Flanders, part of Zealand (Holland) and of n. France, which stretched along North Sea from Somme to Scheldt; name is now retained only in the Belgian provinces of East and West Flanders.

Fleche, LA (*la flēsh'*), tn., Sarthe, France, on R. Loire; military school; gloves, paper, and textiles. Pop. c. 10,000.

Fleet, urb. dist., Hants, England, 3 m. w. of Farnborough; residential tn. Pop. 4,500.

Fleet'wood, seapt. and wat.-pl.,

Lancashire, England, at mouth of R. Wyre; largest fishing port on w. coast; coasting and Irish trade; steamers to Belfast and Isle of Man; deep-sea fishing; saltworks; Rossall School in vicinity. Pop. 23,000.

Flensburg, seapt., Schleswig-Holstein, Prussia, on Baltic Sea, 40 m. n.w. of Kiel; has coal trade, ship-building yards; manufactures sugar, paper, glass, and soap. Pop. 63,100.

Fleury (*flûr*), tn., Orne, France, c. 40 m. s. of Caen; 16th cent. castle (now town hall); Norman church; cotton and linen manufactures; chemical works. Pop. 11,000.

Flint. (1) Munic. bor. and mkt. tn., Flintshire, Wales, on estuary of the Dee, 11½ m. n.w. of Chester; ruined castle of Edward I.; chemical works, paper mills. Pop. 7,600. (2) City, Michigan, U.S.A., 68 m. n.w. of Detroit; large lumber industry; second city in world for production of motor-cars; also manufactures woollens, flour, carriages. Pop. c. 156,000.

Flintshire, mar. co., N. Wales; bounded n. by Irish Sea, n.e. by Dee, e. by Cheshire, s. and w. by Denbighshire; detached portion Maelor lies a few miles s.e. Flintshire produces coal, limestone, zinc, lead, iron; agriculture and esp. stock-rearing important; main rivers, Dee and Clwyd; famous for its wells. Chief towns, Mold (cap.), Flint, St. Asaph. Area, 255 sq. m.; pop. 112,800.

Flodden, hill, near vil. of Branxton, Northumberland, England, 10 m. n.w. of Wooler; scene of battle (Sept. 9, 1513), in which Scots were defeated by English.

Florence (Ital. *Firenze*). (1) Prov., central Italy; watered by the Arno and extending into Apennines on n.; fertile; wine, olive oil, silk. Cap. Florence. Area, 1,497 sq. m.; pop. 821,000. (2) Cap. of above, on Arno, in fertile valley among Apennines; world-famous for its art treasures, history, and natural beauty; abounds in wonderful mediæval and Renaissance buildings, rich picture galleries, fine statuary, gardens, etc.

Among the most notable churches is the Duomo, with Campanile of Giotto, Baptistery, and Museum. Famous palaces include Palazzo Vecchio, Uffizi (picture and sculpture galleries containing many masterpieces), connected by Ponte Vecchio with Pitti Palace. Favourite tourist centre and residential resort for foreigners. Industries include straw plaiting, jewellery, porcelain, glass, mosaics, works of art, etc. Pop. 317,000.

Flores (*flôres*). (1) Most westerly isl. of the Azores; mountainous; well-watered and fertile; cereals and vines. Associated with the story of the *Revenge* (1591). Chief tns., Santa Cruz (cap.) and Lagens. Area, 57 sq. m.; pop. 6,600. (2) Isl., Dutch East Indies, s. of Celebes; very mountainous and volcanic; densely forested; rice, maize, and palms. Area, 8,870 sq. m.; pop. 433,000. (3) Department, s.w. Uruguay; cap. Trinidad. Area, 1,744 sq. m.; pop. 29,000.

Florianopolis (*flori-an-op'o-lis*), formerly **DESTRERO**, cap. of Santa Catharina, s. Brazil, on w. shore of Santa Catharina I., connected with mainland by bridge; small export trade. Pop. 20,000.

Florida. (1) S.E. state, U.S.A., mostly a peninsula between Atlantic and Gulf of Mexico; bounded n. by Georgia and Alabama. Coast about 1,200 m. Many islands, including low islands or reefs called keys. Interior is low and flat; numerous lakes, largest being Okeechobee in s. (c. 1,250 sq. m.); many swamps; many mineral springs. St. John's is the most important navigable river. Climate sub-tropical, but cooled by sea breezes; subject to occasional severe frosts which destroy the orchard fruits; healthy climate makes Florida a favourite holiday winter resort. Soil sandy, and fertilized by heavy rains; great expanses of drained swamp now fertile land; fruit grows abundantly, esp. oranges and grape-fruit; other products are cotton, sugar, tobacco,

potatoes, maize; there are also valuable timber forests. Industries comprise tobacco manufacture, lumber trade, manufacture of turpentine and rosin, and sugar-making; also valuable fisheries. Chief mineral products are phosphates, limestone, and fuller's earth. Chief towns: Tallahassee (cap.), Key West, Jacksonville, Pensacola, Tampa, Miami. Area, 58,666 sq. m. (of which 3,805 sq. m. is water); pop. 1,263,500 (of whom 401,700 are Negroes). (2) Dep., Uruguay, S. America; grassy plains and large herds of cattle; agriculture developing. Area, 4,673 sq. m.; pop. 88,000. (3) Cap. of above dep., 70 m. N. of Monte Video.

Flushing (Dutch, *Vlissingen*), fort. seapt., Holland, at mouth of Schelde, on S. coast of Walcheren; daily steamboat communication with Folkestone and Queenborough; summer resort. Pop. 22,000.

Fly River, largest river of New Guinea; rises in Victor Emanuel Mts. near centre of isl., and flows by large delta into Gulf of Papua; drains fertile plains; length, c. 600 m., 500 m. being navigable.

Fochabers (*föch'-a-bers*), vil. and tourist resort, Moray, Scotland, on R. Spey. Pop. 1,000.

Focsani (*fök-shan'i*), tn., Romania, 55 m. W.N.W. of Galatz; manufactures oil and soap. Pop. 28,000.

Foggia (*fö'ja*). (1) Prov., S. Italy, between Apennines and Adriatic Sea; except for promontory of Monte Gargano (3,460 ft.), belongs to treeless Apulian plain; pasturage for sheep. Area, 2,683 sq. m.; pop. 517,000. (2) Tn. and episc. see, cap. of above, 20 m. W. of Gulf of Manfredonia; important rly. jn. and centre of trade; Norman cathedral. Pop. (com.) 67,500.

Foleshill, par. and vil., Warwickshire, England, 3 m. N. by E. of Coventry; coal and iron mines. Pop. (par.) 10,700.

Folkestone (*fök'ston*), seapt. and wat.-pl., S.E. coast of Kent, England, 15 m. S. by E. of Canterbury; has

steamer services to Boulogne and Flushing. Pop. 35,900.

Fond du Lac, city, Wisconsin, U.S.A., at head of Lake Winnebago; railway centre and workshops; in rich agricultural belt, with enormous output of cheese and butter; varied manufactures. Pop. 26,000.

Fonsagrada (*fön-sa-grad'a*), tn., Lugo, Spain, 75 m. E.N.E. of Santiago; agricultural centre; flour mills. Pop. 18,000.

Fonseca (*fön-sä'ka*), BAY OF, inlet of Pacific Ocean, Central America; sheltered roadstead; numerous isls., Tigré, at entrance, having fine volcanic cone.

Fontainebleau (*fön-tän-blö'*), town, Seine-et-Marne, France, 37 m. S.E. of Paris; surrounded by picturesque forest (65 sq. m.); favourite resort of Fr. landscape painters; magnificent palace, from Middle Ages one of chief residences of kings, emperors, and presidents of France; sandstone quarries; porcelain. Pop. 12,000.

Fontenoy (*fön-ten-oi'*), vil., Hainaut, Belgium, 5 m. S.E. of Tournai; site of fierce battle (1745).

Foochow, port and cap. of Fukien prov., S.E. China, on riv. Min; importance due originally to tea trade; trade of town now mainly in paper, foodstuffs, bamboo, soap, etc.; ocean steamers load and discharge at Pagoda anchorage, 9 m. away; cotton, silk, and porcelain are manufactured; was one of first five treaty ports opened by Treaty of Nanking (1843). Pop. (est.) 313,000.

Footscray. (1) Par., Sidcup urb. district, Kent, part of Greater London; fine woods, hop gardens, and fruit farms in vicinity; paper mills. Pop. 8,900. (2) Tn., Victoria, Australia, suburb of Melbourne; large bluestone quarries, from which most of Melbourne has been built.

Forbes, tn., New South Wales, Australia, 290 m. W. of Sydney, on the Lachlan R.; commercial and agricultural centre; wool scouring and meat freezing. Pop. 5,000.

Forcados (*for-sä'doch*), tn., Nigeria,

c. 150 m. S.E. of Lagos, on one of the mouths of riv. Niger; one of principal ports of Nigeria.

Ford City. See EAST WINDSOR.

Ford'sbridge, par. and mkt. tn., New Forest, Hampshire, England, on the Avon, 10 m. S. of Salisbury; Early English church. Pop. 3,400.

Foreland, NORTH AND SOUTH, two chalk headlands on coast of Kent, England, having Downs and Goodwin Sands off the coast between them; lighthouse on each headland.

Forest of Dean. See DEAN, FOREST OF.

Forêt (*fô-râ*), MONTS DU, mt. range, France; watershed between drainage areas of Rs. Loire and Allier; forested with pine and birch; highest point, Pierre-sur-Haute (5,380 ft.).

Forfar, co. tn., royal burgh, Angus, Scotland, 13 m. N. by E. of Dundee; linen and jute manufacture; bleaching, tanning. Pop. 9,700.

Forfarshire. See ANGUS.

Forlì (*fôr-lê*), tn., and episc. see, cap. of prov. Forlì, central Italy, at foot of Apennines, 40 m. by rail S.E. of Bologna; imposing palaces and fine churches; felt industry. Pop. 52,000.

Formby, urb. dist., Lancashire, England, on coast 7 m. S.W. of Southport; cockles and shrimps; asparagus. Pop. 8,000.

Formia (*fôr-mê-a*), tn., prov. Rome, Italy, on Gulf of Gaeta; anc. tn. on Appian Way; was favourite seaside residence of Roman nobles, including Cicero. Pop. 9,500.

Formosa (1), or TAIWAN, Jap. isl., off coast of China, in China Sea. Mountainous chief summit, Mt. Morrison (14,720 ft.). Volcanoes in N. Plain stretching to W., with short mt. range presenting sheer cliff to Pacific. Two rivers, both called Tamsui Kai; hot springs numerous; mountains thickly wooded; country fertile, well cultivated, with tropical vegetation. Climate damp and hot; typhoons common. Peopled by aboriginals, who are uncivilized and fierce, Chinese traders, and Japanese. Products

include rice, tea, sugar, camphor, jute. Active fisheries. Minerals: gold, silver, copper, petroleum, coal. Trade mostly with Japan. Chief exports are tea, sugar, camphor, and coal. Cap. Taihoku. Chief ports are Keelung and Ampin. Area, 13,892 sq. m.; pop. c. 4,000,000. (2) TERR., N.E. Argentine Republic, S. America; occupies forest-covered plain between rivers Paraguay, Pilcomayo, and Bermejo; principal occupation, timber cutting. Cap. Formosa, on Paraguay R. Area, 41,402 sq. m.; pop. 19,500.

Forres, mkt. town, royal burgh, Moray, Scotland, 12 m. W. by S. of Elgin; is sheltered and very healthy; distilleries and flour mills; woollens and chemicals. Pop. 4,200.

Forst, tn., Brandenburg, Prussia, 44 m. S. of Frankfurt-on-Oder; cloth manufacture, spinning, and dyeing. Pop. 36,000.

Fortaleza. See CEARÁ (2).

Fort Augustus, vil., Inverness-shire, Scotland, at S. extremity of Loch Ness, on Caledonian Canal, 33 m. S.W. of Inverness. Fort (built 1730) is now Benedictine coll., monastery, and hospice, ranking as an abbey. Pop. 660.

Fort Churchill. See CHURCHILL (2).

Fort de France (*fôr di frans*), formerly FORT ROYAL, cap. and commercial centre, Martinique, Fr. W. Indies; exports include rum, sugar, cocoa. Pop. 43,500.

Fort Dodge, city, Iowa, U.S.A., on Des Moines R.; large trade in grain, pottery, and cereal foods; quarries and coal mines in vicinity. Pop. 22,000.

Forteviot (*fôr-tê-vi-ot*), par. and vil., Perthshire, Scotland, on riv. Earn; site of anc. Pictish cap. Pop. 500.

Fort Garry. See WINNIPEG.

Fort George, fort, N.E. Inverness-shire, Scotland, 10 m. N.E. of Inverness; built 1748.

Forth, riv., Scotland; rises on N.E. side of Ben Lomond, flows eastward with many windings (links of Forth), and expands into Firth of Forth;

chief tribes, Teith, Allan, and Devon. *Firth of Forth*, an inlet of North Sea, extending from Alloa eastward about 50 m.; navigable for largest vessels to Queensferry, smaller vessels to Alloa; contains islands Inchkeith (fortified), Inchcolm, and Isle of May; has many good harbours; coaling ports; w. of Forth Bridge on Fife coast is former naval base of Rosyth; important fisheries.

Forth and Clyde Canal connects Firths of Forth and Clyde, Scotland, from Grangemouth on E. to Bowling, Dumbartonshire, on W.; c. 40 m. long, 10 ft. deep; reaches alt. of 156 ft. by twenty locks; completed 1791.

Fort Jameson, tn., N. Rhodesia, near borders of Nyasaland and Mozambique; formerly headquarters of administration of N.E. Rhodesia; has an increasing trade in cotton and tobacco; small white population.

Fort Johnston, tn., Nyasaland, on W. bk. of Shiré R.; trades in cotton and tobacco.

Fortrose, royal burgh and seapt., Ross-shire, Scotland, on Moray Firth, 7 m. N.N.E. of Inverness; agricultural centre; remains of cathedral; sea-bathing. Pop. 900.

Fort Royal. See FORT DE FRANCE.

Fort St. George. See MADRAS.

Fort Scott, city, Kansas, U.S.A., on Marmaton R., near border of Missouri; railway workshops and varied industries; exports corn, wheat, flax, cattle. Pop. 12,000.

Fort Smith, city, Arkansas, U.S.A., on Arkansas R.; manufactures wagons, furniture, and refrigerators; centre of cotton, corn, and potato dist. Pop. 31,000.

Fort Wayne, city, N.E. Indiana, U.S.A.; foundry and machine products, electrical instruments, knitting mills, and agricultural machinery. Pop. 115,000.

Fort William. (1) Tn., Inverness-shire, Scotland, at head of Loch Linnhe and at S. end of Caledonian Canal; aluminium works; tourist resort; starting-point for ascent of Ben Nevis; fort dismantled in 1860.

Pop. 2,500. (2) City, Ontario, Canada, at head of navigation on Lake Superior; fine harbour; outlet for wheat of W. Canada; large grain elevators; workshops of C.P.R. Pop. 20,500.

Fort Worth, city, Texas, U.S.A., 170 m. N. of Austin; in a rich cotton and grain dist.; great railway centre; great trade in oil; meat packing. Pop. 161,000.

Fossà'no, tn., episc. see, Cuneo, Italy, 40 m. by rail S. of Turin; old walls; 14th cent. cathedral; silk, paper, leather. Pop. 18,500.

Fossombrone (*fos-om-brò'nà*), tn., episc. see, Pesaro and Urbino, Italy, 35 m. W.N.W. of Ancona; cathedral; silk; mineral springs. Pop. 10,500.

Fotheringhay (*foth'er-ing-gà*), par. and vil., Northamptonshire, England, 9 m. S.W. of Peterborough. Only a few fragments remain of the castle in which Mary Queen of Scots was imprisoned, tried, and beheaded (1587).

Fougères (*foo-shàr*), tn., Ille-et-Vilaine, France, 23 m. E.S.E. of St. Malo; 11th cent. castle and 15th cent. hôtel de ville; boots and shoes, glass, sailcloth, flannel. Pop. 20,500.

Foula (*foo'la* or *fou'la*), isl., Shetland, 16 m. S.W. of Mainland (3 m. by 1½ m.); fishing station at Ham, on E. side. Pop. 150.

Fourmies (*four-mè'*), tn., Nord, France, 40 m. by rail S.E. of Valenciennes; wool combing and spinning, glass works and iron foundries. Pop. 13,000.

Fouta Jalon (*foo'ta jal'on*), plateau region, French Guinea, W. Africa. Area, c. 30,000 sq. m.; average alt., 4,000 ft.; contains headwaters of Niger, Senegal, Gambia; contains gold and iron; important towns are Tuba and Labi.

Fowey (*foy*), mkt. tn., port, and yachting resort, Cornwall, England, at mouth of Fowey R.; large harbour; pilchards, copper ore, china clay. Pop. 2,400.

Fox Channel, N. of Hudson Bay, Canada, bounded on W. by Melville Peninsula and Southampton I., and on E. by Baffin Land and Fox Land;

named after Luke Fox, who explored Hudson Bay in 1631.

Foyers, FALLS of, two waterfalls, 40 ft. and 165 ft. respectively, on short riv. Foyers, about 1 m. from junction with Loch Ness on E. shore, Inverness-shire, Scotland; formerly most picturesque; now used to generate electricity for aluminium works.

Foyle, LOUGH, shallow lake-like estuary (15 m. long; aver. width, 7 m.) on riv. Foyle, N. coast of Ireland.

Fram'ingham, tn., Massachusetts, U.S.A., 20 m. W. by S. of Boston; rubber and leather goods; boots and shoes. Pop. 17,000.

Fram'ingham, mkt. tn., Suffolk, England, 18 m. N.E. of Ipswich; church contains monuments of Norfolk family. Pop. 2,500.

Francavilla-Fontana, tn., Italy, 22 m. W. by S. of Brindisi; leather goods; wine and oil. Pop. 20,000.

France, rep. of W. Europe; includes isl. of Corsica; in N.E., France approaches within 21 m. of Eng. coast. Boundaries: Belgium, Luxembourg, Germany, Switzerland, Italy, Mediterranean Sea, Spain, Bay of Biscay, and Eng. Channel. Coast of Brittany is rocky and indented; farther E. are high chalk cliffs, farther S. flat and sandy; Mediterranean shore bordered by dunes and marshes W. of Rhone, but to E. of that river the Alps are close to the sea. The highlands of France lie mainly to the S. round the central plateau, which contains the Auvergne, Cévennes, Morvan, and La Marche. E. of this plateau are the Alps and Jura Mts.; W. are the Pyrenees. Between central plateau and Alpine and Pyrenean folded ranges (both barriers to communication) are easy routes of Rhone and Garonne valleys, connecting Mediterranean with northern plain. In E. are Vosges and W. extremity of Ardennes; in N.W. are heights of Brittany. Principal rivers: Seine (485 m.), flowing through the Paris Basin; Loire (634 m.), from central plateau to Bay of Biscay, with net-

work of tributaries linked to other rivers by canals; Garonne (404 m.), flowing with Dordogne into R. Gironde, and joined from Toulouse to Mediterranean by Canal du Midi; Rhone (504 m.), from Alps, joined by slow-flowing Saône; and Rhine forming part of E. frontier. Climate of N. is like that of S. England, but becomes continental in centre and E.; mild, wet winters mark Mediterranean shorelands, where summers are relatively dry and hot. Rich soils and plentiful rains make France predominantly agricultural; wheat, rye, barley, oats, and potatoes are grown in N. and centre, sugar beet in N.E., flax and hemp in N.; vines grow best in Burgundy, Champagne, and round Bordeaux; silk is produced extensively in Rhone valley. Coal, iron, bauxite, pyrites, antimony, lead, and zinc are mined. Alsace-Lorraine is rich in potassium. Olive oil is prepared chiefly round Marseilles. Communications by road are excellent; six great railway companies—Nord, Est, Paris-Orleans, Paris-Lyons-Mediterranean, Midi, Alsace-Lorraine—and the Etat or State line give services to all parts; in 1928 the mileage was 25,947; all are to be electrified. Main canals are in N. and E., giving access to Belgium and the Rhine. Exports include silk and cotton textiles, iron and steel, chemicals, rubber goods, and wine. Cap. Paris. Area, 212,659 sq. m. Pop. 40,744,000; of these, 2,500,000 are foreigners, chiefly Italians, Belgians, Spaniards, and Germans.

Colonies and Dependencies. In Africa: Algeria, Tunis, Fr. West Africa, Fr. Equatorial Africa, Mayotte and Comoro Islands, Madagascar, Réunion, Fr. Somaliland, and a virtual protectorate over Morocco. In Asia: Fr. India, Fr. Indo-China. In Oceania: New Caledonia, with dependencies, Tahiti, and other Pacific islands. In America: French Guiana; Guadeloupe, Martinique; St. Pierre and Miquelon. Total area is 3,958,626 sq. m.; pop. 55,631,900.

France, ÎLE DE. See under ÎLE DE FRANCE.

Frankenberg, tn., Saxony, 11 m. by rail N.N.E. of Chemnitz; woollens, cotton, silk, carpets. Pop. 14,000.

Frankenthal (frank'en-tal), town, Palatinate, Bavaria, Germany, 6 m. N.W. of Mannheim; engineering shops and bell foundries; agricultural implements. Pop. 25,000.

Frankfort, city, N. Kentucky, U.S.A., on Kentucky R.; in agricultural and mining dist. famous for rearing thoroughbred horses; varied small manufactures. Pop. 10,000.

Frankfurt on Main, city, Hesse-Nassau, Prussia, on R. Main; great banking centre and leading Ger. rly. jn.; terminus of Rhine river traffic; has handsome modern streets, squares, and suburbs. Seat of univ., founded 1914. Industries are less prominent than trade, but include jewellery, soap, perfumery, chemicals, machinery, tapestry, waxcloth, carpets, tobacco, photographic and electrical apparatus. Pop. 466,500.

Frankfurt on Oder, tn., Brandenburg, Prussia, 50 m. S.E. of Berlin, on R. Oder; important commercial centre; three annual fairs; manufactures machinery, firearms, chemicals. Pop. 71,000.

Franklin, Provisional Dist., N.W. Territories, Canada, comprising the islands from Banks I. in W. to Baffin Land in E.; mainly within Arctic Circle; fur-bearing animals numerous; inhabitants consist of a few Indians, Eskimos, and fur traders. Area, 554,000 sq. m.

Franz Josef Land (frants jō'sef), archipelago of some sixty islands, N. of Novaya Zemlya; c. 250 m. E. of Spitsbergen; glacier clad; discovered (1873) by Austro-Hungarian expedition; claimed by Russia (1929).

Frascati (fras-kā'tē), tn., summer resort, Rome prov., Italy, on N. slopes of Alban Hills; handsome villas of Roman nobility; Prince Charles Edward Stewart died here; famous wine. Pop. 11,000.

Frazer, riv., Brit. Columbia, formed

by union of S. Fork and N. Fork; former rises in Mt. Brown, Rocky Mts., and at Fort George joins N. Fork, which rises in same mts.; enters Strait of Georgia at Vancouver after course of 750 m.; navigable as far as Yale (c. 100 m.). Salmon canneries on river.

Frazerburgh, seaport, Aberdeenshire, Scotland, 47 m. N. by E. of Aberdeen; leading centre of herring fishery. Pop. 9,700.

Fray Bentos (fri bent'ōs), or INDEPENDENCIA, tn., Uruguay, cap. dep. Rio Negro, 170 m. N.W. of Montevideo; noted for meat extract. Pop. 5,000.

Fredericia (fred-cr-is'e-a), seaport, Denmark, at N. entrance of Little Belt, on E. coast of Jutland; rly. jn.; steamship connection with Fünen; considerable shipping trade; railway works; manufactures tobacco and cotton goods. Pop. 18,500.

Fredrick, city, Maryland, U.S.A., 42 m. N.W. of Washington; brush and canning factories, flour mills, tanneries; in a wheat dist. Pop. 11,000.

Fredrickton, cap. New Brunswick, Canada, on St. John R., at head of navigation, 84 m. from sea; rly. jn.; seat of univ. of New Brunswick; large lumber trade; manufactures mill machinery and wooden ware. Pop. 8,000.

Fredrikshavn, seaport, Denmark, on Kattegat, 36 m. N.E. of Aalborg; second best harbour on E. coast of Jutland; exports dairy produce and fish. Pop. 12,000.

Fredrikshald. See HALDEN.

Fredrikstad, seaport, S. Norway, at mouth of R. Glommen; exports timber, stone, and bricks, and has railway workshops and shipbuilding. Pop. 14,500.

Freetown, cap. Sierra Leone, W. Africa best harbour on W. coast of continent; coaling station; formerly 'the white man's grave,' now by sanitation and warfare on mosquitoes the old reproach has been removed; railway to Pendembu (227 m.). Pop. 44,000.

Freiberg (*frî'berg*), tn., Saxony, Germany, 20 m. E. of Chemnitz; centre of silver and lead mining; has important mining academy; manufactures woollen goods, ironware, and sugar. Pop. 35,000.

Freiburg (*frî'boorg*), (1) or **FREIBURG-IM-BREISGAU**, tn. and archiepisc. see, Baden, Germany, beautifully situated at foot of the Schlossberg (Black Forest), 39 m. by rail N.E. of Basle; streams from river flow through streets; fine buildings, including 12th-century cathedral, univ., and palaces of former grand-duke and archbishop; wine and timber; manufactures include buttons, tobacco, silk thread, and paper. Pop. 90,500. (2) See **Fribourg**.

Freising (*frî'ing*), tn., Bavaria, Germany, 26 m. N.N.E. of Munich; iron foundries and manufactures of agricultural machinery and porcelain. Pop. 15,000.

Fre'mantle, tn., W. Australia, at mouth of Swan R.; seaport for Perth; first port of call in Australia for European mail steamers; soap, tin, leather; sawmills, ironfounding, and boat building; harbour enclosed by two large breakwaters. Pop. 29,000.

French Congo. See **FRENCH EQUATORIAL AFRICA**.

French Equatorial Africa, or **FRENCH CONGO**, Fr. terr. in W. Central Africa; enclosed by Gulf of Guinea, Nigeria, Fr. W. Africa, Anglo-Egyptian Sudan, Belgian Congo, and Port. Kabinda; it consists of Gabon Colony, Middle Congo, Ubangi-Shari Colony, and Chad Terr.; coast region swampy; climate unhealthy; immense forests with valuable wood. Chief rivers: Ogowe, Nyanga, Sanga, Gabon, Shari, Kulu; communication mainly by rivers. Resources as yet undeveloped, but rubber, palm oil, coffee, cocoa, and cotton are produced. Ivory is an important export. Copper, zinc, and lead are found. Principal towns: Brazzaville (cap. Middle Congo), Libreville (cap. Gabon), Bangui (cap. Ubangi-Shari), Fort Lamy (cap. Chad

Terr.), Loango (seapt.). Total area, 912,049 sq. m.; pop. 3,127,000.

French Guiana. See **GUIANA**.

French Guinea, colony Fr. W. Africa, between Portuguese Guinea and Sierra Leone; coast generally flat and low-lying; about 30 m. inland is Fouta Jalon plateau, edged by line of cliffs called the Susu hills. E. of this tableland country slopes to basin of the upper Niger, the greater part of which is in French Guinea. Climate is hot, moist, and unhealthy. Chief products and exports: rubber, palm oil, nuts, cattle, hides, and bananas; railway between Konakri and Niger at Kourassa, continued to Kankan. Konakri is cap. and principal port. Area, c. 92,640 sq. m.; pop. 2,186,000.

French India, five scattered provs. in India, Pondicherry, Karikal, Mahé, Yanam, and Chandernagore. Combined area, 196 sq. m.; pop. 287,500. See separate articles.

French Indo-China embraces five states, Annam, Cambodia, Cochinchina, Tongking, and Laos, also Kwangchow-wan, leased from China. Chief exports are rice, rubber, fish, coal, pepper, cattle, and hides; zinc and tin are found. Cap. Hanoi. Area, c. 285,000 sq. m.; pop. c. 20,700,000. See articles on separate states.

French Sudan. See **SUDAN**.

French West Africa, general government uniting Fr. possessions in N.W. Africa; comprises Senegal, Mauritania, Upper Volta, French Sudan, Niger, French Guinea, Ivory Coast, Dahomey, and Circle of Dakar and dependencies; exports are fruits, oils, rubber, cotton, timber. Cap. Dakar, seat of gov.-gen. Area, c. 1,447,200 sq. m.; pop. c. 13,541,000.

French West Indies comprise the islands of Martinique, and Guadeloupe with its dependencies Marie Galante, Les Saintes Désirade, St. Bartholomew, and St. Martin (in part), all among the Lesser Antilles.

Freshwater, par. and bathing resort, S.W. coast, Isle of Wight;

Farrington House, residence of Tennyson, is near by. Pop. 3,400.

Fresno, city, California, U.S.A., 160 m. s.e. of San Francisco; in fruit-growing and dairying region; oil and copper in vicinity. Pop. 53,000.

Fribourg (*frē-boor*), or **Freiburg**. (1) Canton, Switzerland, between the cantons of Berne, Vaud, and Neuchâtel; mainly pastoral and agricultural; manufactures cheese, watches, paper, and chocolate. Area, 644 sq. m.; pop. 143,000, mostly R.C. and French-speaking. (2) Cap. of above, 26 m. s.w. of Berne; seat of bishop and of R.C. univ. Pop. 20,000.

Friedrichshafen (*frēd'richs-hā-fen*), port and bathing resort, Württemberg, Germany, on e. shore of Lake Constance; machine shops, boat-building yards, zeppelin workshops. Pop. 11,300.

Friedrich-Wilhelmshafen. See **MA-DANG**.

Friendly Islands. See **TONGA ISLANDS**.

Fri'ern Bar'net, urb. dist., Middlesex, England, 3 m. s. of Barnet; part of Greater London; formerly contained a Priory of the Knights of St. John. Pop. 23,100.

Friesland (*frēs'land*), or **VRIESLAND** (anc. *Frisia*), prov., Holland, on n.e. of Zuider Zee; surface flat, part below level of sea; coasts protected by dikes; exports horses, cattle, dairy produce. Cap. Leeuwarden. Area, 1,249 sq. m.; pop. 403,500.

Frimley and Camberley. See **CAMBERLEY**.

Frin-ton-on-Sea, urb. dist., Essex, England, 1½ m. s. of Walton-on-the-Naze; wat.-pl. Pop. 2,200.

Fris'lan Islands, chain of islands in North Sea, between Zuider Zee and Jutland, made up of three groups—W. Frisian Islands (Texel, Vlieland, Terschelling) belonging to Holland; E. Frisian Islands (Borkum, Juist, Norderney) belonging to Germany; and N. Frisian Islands (including Sylt, Föhr) divided between Germany and Denmark; chain is gradually

(3,601)

being submerged through marine erosion.

Frod'sham, mkt. tn., Cheshire, England, at confluence of rivs. Weaver and Mersey, 10 m. n.e. of Chester; chemical works. Pop. 5,100.

Frome (*froom*), or **FROME SELWOOD**, mkt. tn., Somerset, England, on R. Frome, 12 m. s. of Bath; former extensive woollen trade now declining; metal works, brewing, printing, silk, tools, and wool-dressing cards. Pop. 10,700.

Fuca, Juan de (*foo'ka, whān de*), STRAIT OF, connecting Puget Sound with the Pacific, on n.w. coast of N. America; between state of Washington, U.S.A., and Vancouver, Brit. Columbia; average width, 15 m.; length, c. 100 m.

Fuente Ovejuna (*fwen'tā o-vā-hoon'a*) tn., Cordoba, Spain, 48 m. n.w. of Cordoba; honey largely produced in vicinity; cattle breeding; quarries and coal and lead mines. Pop. 15,300.

Fuenterrabia (*fwen-tā-ra-bē'a*), frontier town, N. Spain, at mouth of riv. Bidassoa; popular summer resort; fishing. Pop. 6,000.

Fuji-san', or **FUJYAMA**, highest, most beautiful and best-known mountain of Japan, c. 60 m. w.s.w. of Tokyo; height, 12,395 ft.; a dormant volcano; visited by Japanese for worship; figures on Japanese works of art.

Fukien (*foo-kēn'*), mountainous and mar. prov. of s.e. China; poor sandy soil in valleys, but carefully cultivated and yielding abundant crops; watered by Min R. (N.), Lung R. (Amoy region), and head-waters of Han R. (S.); chief agricultural products include tea, rice, cotton, indigo, sugar, tobacco, and camphor; there is also a large trade in timber, especially fir, pine, and rosewood. Paper is manufactured from bamboo pulp. Minerals include coal, silver, and gold. Chief ports, Foochow (cap.) and Amoy (original treaty ports); imports mainly from Hong-Kong and Shanghai. Area, 46,320 sq. m.; pop. c. 13,158,000.

Fukui (*foo-koo'i*), tn., w. Honshu, Japan, on R. Ashiwa, 5 m. from sea; c. 200 m. w. of Tokyo. Paper and thin white silk. In volcanic dist., much exposed to earthquakes. Pop. 60,000.

Fukuoka (*foo-koo-o'ka*), town, Kyushu I., Japan, 90 m. N.N.E. of Nagasaki by rail; joined to Hakata; colossal bronze head of Buddha; silk manufactures. Pop. 146,000.

Fukushima (*foo-koo-shē'ma*), tn., Honshu, Japan, 150 m. N. of Tokyo; centre for raw silk and silkworms' eggs.

Fukuyama (*foo-koo-yā'ma*). (1) Formerly MATSUMAI, seapt., s. Hokkaido, Japan, 61 m. by rail s.w. of Hakodate; open roadstead; ruins of castle; temples. Pop. c. 15,000. (2) Tn., Honshu, Japan, on s. coast, 110 m. w. by s. of Kobe; temple with art treasures.

Fulda (*fool'dā*), tn. on R. Fulda, Hesse-Nassau, Prussia, 54 m. N.E. of Frankfurt; has episc. palace; famous Benedictine abbey, founded in 744; most anc. seat of eccles. learning in Germany; textiles and iron goods. Pop. 30,000.

Ful'ham, suburb, London, on Thames, palace of bishops of London. Pop. 150,900.

Ful'ton, city, New York, U.S.A., 23 m. N.W. of Syracuse; woollens, flour, paper, cutlery. Pop. 13,000.

Fulwood, urb. dist., Lancs, England, suburb of Preston. Pop. 7,500.

Funchal (*foon-shal*), seaport, cap. of Madeira Islands, on s. coast of Madeira; popular winter resort, a commercial centre; port of call for steamers. Pop. 21,000.

Fun'ty, BAY OF, inlet of N. Atlantic between New Brunswick and Nova Scotia, Canada; 145 m. long and 50 m. broad at s., narrowing to 30 m. at head, where it divides into Chignecto Bay and Minas Channel; highest 'bore' in world; tide rises at Chignecto to over 50 ft., with crest 3 to 6 ft. Chief harbours are St. Andrews and Saint John (New Brunswick), Digby and Annapolis (Nova Scotia).

Fünen (*fū'nen*), second largest Danish isl., between Kattegat and Baltic, separated from Zealand by Great Belt, and from Jutland by Little Belt; fruitful; well wooded; cereals and fine breed of cattle. Chief towns, Odense and Svendborg. Area, c. 1,100 sq. m.

Fünflirchen. See Pfäcs.

Furka Pass (*foor'ka*), saddle (7,992 ft.) separating upper Reuss valley from the valley of the Rhone, Switzerland, crossed by road from Andermatt; railway under construction which will pierce Furka by a tunnel (2,138 yds.).

Furieux (or FLINDERS) Islands (*foor-nō*), group in Bass Strait between Tasmania and Victoria, Australia; the chief is Flinders or Great Island (35 m. by 10 m.); mostly barren; named after Tobias Furneaux, who discovered them in 1773.

Furnes (*foorn*), tn., prov. W. Flanders, Belgium, 5 m. E. of French frontier, at the junction of several canals near North Sea; fête of Calvary celebrated on last Sunday of July each year. Pop. 8,000.

Fur'ness, detached dist. of N. Lancashire, England; hilly; n. portion part of Lake Dist.; s. portion a peninsula terminating at Piel. Between estuary of Duddon and Morecambe Bay is Walney I. Rich beds of hematite iron ore have led to rise of Barrow. **Furness Abbey**, now ruins, 2 m. N.E. of Barrow.

Fürstenwalde (*foors-ten-val'de*), tn., Brandenburg, Prussia, 28 m. E. of Berlin by rail; 14th cent. church; manufactures are important, including brewing, malting, wool combing, and cloth making; glass, chemicals, stoves; rich coalfields in vicinity. Pop. 23,500.

Fürth, tn., Bavaria, Germany, 5 m. N.W. of Nuremberg; manufactures picture-books, mirrors, lithographs, toys, bronze and gold-leaf articles. Pop. 74,000.

Fusan, port, Korea Bay, at S.E. tip of Korea, terminus of Seoul-Fusan railway. Exports include rice, raw

silk, beans, and hides. Pop. 113,000 (41,000 Japanese).

Fushiki (*foo'shē-kē*), or **FUSHIGI**, seapt. on Toyama Bay, w. coast Honshu, Japan, 32 m. N.E. of Kanazawa; a special open port since 1889.

Fyna, Loch, arm of Firth of Clyde, Scotland; breadth, 1 to 5 m.; length N. to S. over 50 m.; great variety of shore and mt. scenery; famous for its herrings.

Fyvie (*fī'vī*), par., Aberdeenshire, Scotland, 23 m. N.W. of Aberdeen; Fyvie Castle, seat of Lord Leith. Pop. 3,400.

Fyzabad'. (1) Dist., United Provs., India, lying between rivs. Gogra and Gumti; alluvial and well-wooded; exports rice, sugar, oil-seeds, cloth, and tobacco. Pop. 1,171,900. (2) Chief tn. in above; sugar-refining and agricultural produce; military cantonment. Pop. 56,600.

G

Gaba Tepe, headland, w. coast, Gallipoli, 5 m. from Maidos on Dardanelles; Australians and New Zealanders made famous landing on narrow beach c. 1 m. N. on April 25, 1915.

Ga'bes. See **QABES**.

Gablonz. See **JABLONEC**.

Gabon (*gā-bōn'*), maritime colony, French Equatorial Africa; resources undeveloped. Cap. Libreville, on R. Gabon estuary. Area, 104,320 sq. m.; pop. 390,000.

Gad'ag, or **GARAG**, tn., Dharwar dist., Bombay, India, 120 m. E. of Goa; large trade in raw cotton and cotton and silk fabrics. Pop. 41,500.

Gadames. See **GHADAMES**.

Gads'don, tn., Alabama, U.S.A., 57 m. N.E. of Birmingham; coal and iron in dist.; large steel plant; manufactures cotton, cotton-seed oil, cars. Pop. 15,000.

Gainsborough, mkt. tn. and port, Lincolnshire, England, on R. Trent, 15 m. N.W. of Lincoln; manufactures agricultural machinery; linseed and other oilcake mills; engineering; river trade. Pop. 18,700.

Gair loch, sea-loch, w. Ross-shire, Scotland; length, 6 m.; breadth, 3 m.; gives its name to par. and vil. at head of loch.

Galapagos Islands (or *gal-ap'ag-os*), group of islands off w. coast of S. America belonging to Ecuador; larg-

est isl., Albemarle, is c. 75 m. long; dense vegetation in s., covered with lava in N.; numerous volcanoes, some still active; tortoises now few in number; guano exported. Area, 2,868 sq. m.; pop. c. 500.

Galaahieis', municipal burgh, Selkirkshire, Scotland, on Gala Water, 33½ m. S.E. of Edinburgh; important centre of Scottish woollen industry; specializes in tweeds; hosiery and boot making. Pop. 13,100.

Galaiz', riv. port, Moldavia, Romania, on L. bk. of Danube, 10 m. above junction with Prut; iron, copper, candle, and soap industries; petroleum refineries; exports grain, meal, and timber; seat of Danube Commission. Pop. 154,000.

Galesburg, city, Illinois, U.S.A., 45 m. N.W. of Peoria; rly. workshops; motor-cars, engines, typewriters; grain and coal in dist. Pop. 29,000.

Galicia (*gā-līsh'ē-a*). (1) Part of Poland, on N. side of the Carpathians, bounded on N.W. by the Vistula, and in E. drained by Upper Dniester and Prut; fine pasture and arable land, and immense forests. (2) Anc. kingdom, N.W. Spain; divided into provs. of Coruña, Lugo, Orense, and Pontevedra; surface generally mountainous; climate mild; has many good harbours; principal river, Minho; lead, tin, copper, iron; agriculture backward; chief exports: timber,

cattle, sardines; largest tn., Corunna. Area, c. 11,250 sq. m.; pop. 2,125,000.

Gal'ilee. (1) Part of Palestine, bounded n. by Syria, e. by R. Jordan, s. by Samaria and Mt. Carmel, w. by Mediterranean; length, c. 50 m.; breadth, 30 m.; chief interest lies in its being the cradle of Christianity; now a centre of Jewish Settlements. Area, c. 1,600 sq. m. (2) SEA OF, lake, N. Palestine; length, 13 m.; 680 ft. below sea-level, situated at bottom of volcanic basin; R. Jordan flows through the lake; w. side has good vegetation, but n. and e. are bare and rocky.

Gallarate (*gāl-a-rā'tā*), tn., Lombardy, Italy, 25 m. n.w. of Milan by rail; cotton and linen factories. Pop. 10,000.

Galle (*gāl*), or POINT DE GALLE, port, s.w. Ceylon; formerly chief port of isl.; exports tea and coconut oil. Pop. 39,000.

Gallipoli, peninsula, Turkey, between Gulf of Xeros (Seres) and Strait of Dardanelles; 53 m. in length, and varying in width from 12 to 2 or 3 m.; mostly a mass of rocky ridges, covered with dense scrub; little cultivation and few villages; strip of level ground around Suvla Bay; in s. peak of Achi Baba (730 ft.). Scene of famous but unsuccessful Allied campaign during Great War.

Gal'loway. (1) Dist., s.w. Scotland, comprises shires of Wigtown and Kirkcudbright. Gives its name to a breed of cattle. (2) MULL OF, promontory, Wigtownshire, Scotland; at extremity of Rhinns of Galloway, most s. point of Scotland. (3) RHINNS OF. See RHINNS (1).

Gal'ston, tn., Ayrshire, Scotland, on R. Irvine; coal in vicinity; lace and hosiery. Pop. 4,600.

Galt, tn., Ontario, Canada, 25 m. w. by s. of Hamilton; founded by Scottish novelist, John Galt; flour and iron. Pop. 13,500.

Gal'veston, port and city, Texas, U.S.A., on Galveston I., Gulf of Mexico; connected by rly. and causeway with mainland; has large found-

dries, mills, and machine shops; principal cotton port of U.S.A. Pop. 53,000.

Gal'way. (1) Maritime co., Connaught, I.F.S.; coast-line broken; co. includes Lough Corrib and part of Lough Mask; in w. lies wild and mountainous dist. of Connemara; flat and marshy in e.; chief rivs. are Shannon (forming s. boundary), Black, and Suck; Slieve Aughty mts. in s.; Twelve Pins (2,395 ft.) in w.; valuable fisheries; marble, granite; has seven round towers and many monastic ruins. Co. tn., Galway. Area, 2,293 sq. m.; pop. 169,500. (2) Port, cap. of above; good harbour; fisheries; exp. agricultural produce, wool, marble. Pop. 14,200.

Gam'bia. (1) Riv., W. Africa; rises in Fouta Jalon, flows generally w., through Gambia to Atlantic at Bathurst; length, 1,000 m.; navigable for 200 m. (2) British crown colony and protectorate, W. Africa; consists of a narrow strip of country on both banks of R. Gambia, from its mouth to Yarbataenda, c. 250 m. inland; country flat and marshy; climate fairly healthy; chief exports, ground nuts, hides and skins, palm kernels; cable communication from Bathurst to St. Vincent and Sierra Leone; no rlys. Cap. Bathurst. Area, 4,134 sq. m. (colony, 4 sq. m.); pop. 210,500.

Gand'sha, formerly ELISABETPOL, cap. Elisabetpol dist., town, Azerbaijan, U.S.S.R., 190 m. w. of Baku; vineyards; textiles; copper, manganese. Pop. 55,500.

Ganges (*gān'jēs*), greatest and most sacred river of India; rises in Himalayas under name of Bhagirathi, and at junction with Alaknanda takes name of Ganges; flows generally s.e., and enters Bay of Bengal by one of largest deltas in world; most important distributaries, Hooghly, on w., Meghna on e.; length of main stream, 1,540 m., greater part of which is navigable; drains over 400,000 sq. m., mostly remarkably fertile and densely populated; chief tribs., Son,

Jumna, Ramgunga, Gumti, Gogra, Gandak, Jamuna, and Kosi; on its banks are many great cities, including Calcutta, Patna, Benares, Allahabad, Cawnpore. See also **SUNDARBANS**.

Ganjam', dist., extreme N.E. Madras Presidency, India; traversed by E. Ghats; fertile plains and valleys; is well watered; agriculture; salt. Cap. Berhampur. Area, 4,800 sq. m.; pop. 1,836,000.

Gap. (1) Chief tn., Hautes-Alpes, S.E. France; marble, hats, textiles, sawmills. Pop. 7,000. (2) CANAL, or CANAL DU DRAC, irrigation canal connecting the Drac and Durance rivs., S.E. France; completed in 1888; with branches, has total length of 445 m.

Garag. See **GADAG**.

Gard (*gür*), dep., S. France; on Mediterranean; surface slopes towards Rhone and Mediterranean, with numerous lakes and marshes on coast; chief rivs., Gard and Vidourle; rich in coal, iron, lead; olives and chestnuts extensively grown; important vineyards; silkworm rearing. Chief tn., Nîmes. Area, 2,270 sq. m.; pop. 403,000.

Gar'da, LAKE OF, N. Italy, between Lombardy and Venetia; drained by Mincio at S.E. end into river Po; studded with islands in midst of beautiful scenery; favourite health resort. Area c. 143 sq. m.

Gard'ner, town, Massachusetts, U.S.A., 25 m. N.W. of Worcester; one of leading centres for manufacture of chairs; other industries, toys, baby carriages, furniture, silverware, machinery. Pop. 17,000.

Gareloch (*gür'loch*), arm of Firth of Clyde, Scotland; runs N.W. from Helensburgh; good anchorage, where ships adjust compasses; summer resorts, Rhu, Shandon, Garelochhead, Clynder, and Roseneath, on its shores. Length, 7 m.; average breadth, 1 m.

Gar'field, tn., New Jersey, U.S.A., on Passaic R., 10 m. N. of Newark; woollen and worsted mills. Pop. 30,000.

Garhwal (*gür-whäl'*), dist., United Provinces, India, on S. slope of the Himalayas; adjoins Simla dist.; mountainous and densely forested; chief rivs., Alaknanda and other head-streams of Ganges; exp. grain and coarse cloth; trades with Tibet. Area, 5,612 sq. m.; pop. 485,000.

Garó Hills, mountainous dist., W. Assam, India, bounded by R. Brahmaputra on W.; heavily forested. Area, 3,140 sq. m.; pop. 180,000.

Garonne (*gü-ron'*), riv., S.W. France, rises in Pyrenees, flows N.N.W., enters Bay of Biscay; length, 430 m.; navigable to Toulouse; chief tribs., Save, Gers, Baise, Tarn, Lot, Dordogne.

Gar'ston, port, Liverpool bor., Lancs, England, on Mersey docks; iron and copper works. Pop. 29,000.

Garut', dist., W. Java, Dutch E. Indies; tea, rubber, cinchona; health resort (alt. 2,300 ft.). Pop. 22,500.

Gar'y, city, Indiana, U.S.A., on Lake Michigan; great steel and tin-plate works. Pop. 101,000.

Gaspé (*gäs'pä*), peninsula and dist., E. Quebec prov., Canada, between R. St. Lawrence on N. and Bay of Chaleur on S.; fisheries are richest in America. Area, 4,550 sq. m.; pop. 40,500, mostly fishermen.

Gasto'nia, city, N. Carolina, U.S.A., near boundary of S. Carolina, 20 m. W. of Charlotte; cotton mills; textile machinery. Pop. 13,000.

Gat'china. See **TROTSK**.

Gateshead, tn., Durham, England, on R. Tyne, opposite Newcastle, and connected with it by several bridges; locomotive depot; extensive iron-works; glass and chemical works; grindstone quarries; coal mines in vicinity. Pop. 122,400.

Gatoom'a, tn., S. Rhodesia; c. 100 m. S.W. of Salisbury; centre of rich gold field; aerodrome. Pop. (whites) 650.

Gauhati (*gou-hä'tē*), tn., Assam, India, on R. Brahmaputra; exp. cotton, silk, lac to Calcutta. Pop. 16,500.

Gävle, or **GEFLE** (*gäv'le*), port, Sweden, on inlet of Gulf of Bothnia; exp. timber, wood-pulp, iron and steel; manufactures sail-cloth, textiles, and tobacco; shipbuilding. Pop. 39,500.

Gawler, tn., S. Australia, 25 m. N.E. of Adelaide; foundries, flour mills. Pop. 2,000.

Gaya (*gä'a*). (1) Dist., Bihar and Orissa, India; consists of a level and richly fertile plain; mica mines; chief river, Son. Area, 4,712 sq. m.; pop. 2,153,000. (2) Tn., India, cap. of above, 57 m. S. of Patna; centre of pilgrimage; silk and cotton manufactures. Pop. 68,000.

Ga'za, tn. and port, S. Palestine; commercial centre; coarse cloth; trades in wheat, barley, wool. Pop. 17,300.

Ga'saland, dist., Portuguese E. Africa; watered by R. Limpopo; fertile in lower parts; sugar-cane, rice, maize; supplies labour for Transvaal mines.

Gdynia (*gdin'ya*), port, Poland, 12 m. N. of Danzig; canal to R. Vistula; exp. timber, coal, dairy produce, sugar. Pop. 40,000.

Géant, Col. du (*shā'on*), glacier pass (11,060 ft.) in Alps; leads from Chamonix to Courmayeur; on N.E. is Aiguille du Géant (13,170 ft.).

Gebweiler (*gib'vī-er*). See **GUEB-WILLER**.

Geelong (*jē-long'*), port, Victoria, Australia, 45 m. by rail S.W. of Melbourne; woollen mills; flour mills, salt works, tanneries. Pop. 39,000.

Geestmunde (*gis-tē-moon'de*), port, Hanover, Prussia, at mouth of R. Weser, deep-sea fisheries; included in Wesermünde. Pop. 30,000.

Gefle. See **GÄVLE**.

Geislingen (*gis'ling-en*), tn., Württemberg, Germany, 38 m. by rail E.S.E. of Stuttgart; ivory and wood carving; iron and glass works; machinery. Pop. 14,000.

Ge'derland, prov., Holland, S.E. of Zuider Zee; surface more hilly than most of Dutch provs.; traversed by Waal, Rhine, Ysel, Maas; soil very

fertile along riv. banks. Chief crops: cereals, flax, tobacco; cattle rearing; brick making; paper and cotton industries. Cap. Arnhem. Area, 1,941 sq. m.; pop. 812,000.

Gelligaer (*geth-li-gī'r*), urb. dist., Glamorganshire, Wales, 14 m. N. of Cardiff; several collieries near. Pop. 41,000.

Gellivara (*yel-lē-vā'ra*), tn., N. Sweden, 43 m. N. of Arctic Circle; extensive iron-ore mines. Pop. 12,000.

Gelsenkirchen (*gel'sen-kēr-chen*), tn., Westphalia, Prussia, 6 m. E. of Essen; coal mining; steel, soap, glass, chemicals. Pop. 207,500.

Gem'ni Pass, Alpine route (7,641 ft.) connecting Swiss cantons Berne and Valais; steep descent to Leukerbad on S. side.

Gen'va (*Fr. Genève*). (1) Canton, Switzerland; market gardens, orchards, vineyards; watch making and jewellery. Area, 108 sq. m.; pop. 166,000. (2) Cap. of above, at S.W. end. Geneva is overlooked by Jura and Alps; R. Rhone, issuing from lake, flows through city; tn. a great commercial, industrial, and educational centre and favourite resort of foreigners; chief industries, watch making, jewellery, diamond cutting, enamelling, musical boxes, scientific instruments, and cutlery; headquarters of the League of Nations. Pop. 128,500. (3) LAKE OF, or LAC LEMAN, largest lake of Switzerland, bordering Haute-Savoie, France, and cantons Geneva, Vaud, and Valais; traversed by Rhone; length, 40 m.; greatest breadth, 8½ m.; alt., 1,230 ft. Rhone silt is continually diminishing its area; many famous resorts round shores. (4) City, New York, U.S.A., 40 m. S.E. of Rochester; state agricultural experiment station; manufactures razors, lenses, marine engines. Pop. 15,000.

Gen'oa (Italian, *Genova*), strongly fortified port and commercial city, Italy, on Gulf of Genoa; situated in Riviera; many palaces; shipbuilding, silk and velvet, cabinet-making, motor-cars, filigree work, damask, lace,

embroidery, candied fruit, leather, macaroni. Pop. 316,300.

Gentilly (*zhón-té'ye*), suburb of Paris, France, 2½ m. s. of Notre Dame; quarries, brick works, chemical works. Pop. 10,000.

George town. (1) Cap. of Brit. Guiana, at mouth of Demerara R.; climate unhealthy; ships sugar, gold, diamonds, timber, balata, cocoa, coffee; good harbour. Pop. 60,000.

(2) Part of Washington, cap. of U.S.A.; manufacturing dist.; trades in coal, tobacco, grain. (3) City, S. Carolina, U.S.A., 56 m. N.E. of Charleston; exp. cotton, rice, pinewood, fish, and turpentine. Pop. 5,000.

George Town, cap., Penang I., Straits Settlements. Pop. 27,000.

Georgia. (1) S. State, U.S.A., bounded by Tennessee and N. Carolina on N., S. Carolina and Atlantic Ocean on E., Florida on S., and Alabama on W. In N. and W. Appalachian Mts. rise to c. 5,000 ft. Principal rivs., Apalachicola (navigable c. 300 m.), flowing into Gulf of Mexico; Savannah and Altamaha (navigable c. 300 m.), flowing into Atlantic. Climate mild and, except in lowlands and swamp regions in S., agreeable and healthy. Game plentiful; alligators numerous in rivs.; c. 70 per cent. of country is farm land, largely worked by Negroes; state is large producer of cotton and greatest grower of sea-island cotton; corn and wheat are cultivated in N. regions; rice near the coast; sugar-cane; tobacco; much fruit—oranges, melons, grapes, pineapples, peaches, and bananas; pine forests; fisheries. Chief industries, cotton and woollen manufactures; iron and steel trades; lumber, timber planing, flour and grist milling. Cap. Atlanta; chief port Savannah; other cities are Augusta, Macon, and Columbus. Area, 59,265 sq. m. (of which 540 sq. m. are water); pop. 3,200,000. (2) Rep., U.S.S.R., between Caucasus Mts. and Armenia; rly. from Poti to Baku (in Azerbaijan); chief crops, wheat, barley, maize, rice, cotton, tobacco; Mediterranean

fruits; silk; forests; large manganese deposits. Cap. Tiflis. Area, 26,381 sq. m.; pop. 2,667,000.

Georgian Bay, N.E. div. of Lake Huron, Ontario, Canada; waterway has been proposed to connect the bay with St. Lawrence, by way of French R., L. Nipissing, and Ottawa R.

Gera (*gá'ra*), tn., Thuringia, Germany, 45 m. S.S.W. of Leipzig; woollens, musical instruments, leather, printing; lignite mines. Pop. 81,000.

Ger'aldton, port on Champion Bay, W. Australia; outlet for Murchison goldfield; exp. gold, copper, wool, lead, and sandalwood. Pop. 4,000.

Gérardmer (*zhá-nir-már'*), mkt. tn., and health resort, Vosges, France, 33 m. by rail E.S.E. of Epinal, famed for Gêromé cheese; manufactures linen and woollen goods. Pop. 4,000.

German Vol'ga, rep., S.E. Russia; drained by R. Volga, extreme climate; scanty rainfall; barley, maize, rye, millet, sunflower seeds; sawmills and flour mills; tobacco factories; settled by German colonists (1760). Cap. Pokrovsk, on R. Volga, opposite Saratov. Area, 10,327 sq. m.; pop. 571,000.

Germany (DEUTSCHES REICH), rep., Central Europe, comprising seventeen states; bounded on N. by North Sea, Denmark, and Baltic Sea; on E. by Lithuania and Poland, which, with Free City of Danzig, separate E. Prussia from the rest of Germany; on S. by Czechoslovakia, Austria, and Switzerland; on W. by France, Luxembourg, Belgium, and Holland. The N. forms part of great European plain, the S. generally is hilly; important rivs. flowing N. are the Pregel in E. Prussia; Oder, with Warthe trib., to Baltic Sea; Elbe and Weser, to North Sea; middle course of Rhine, with Main, Ruhr, etc., of special value; Danube, rising in Black Forest; large fresh-water lagoons (*haffs*), at mouths of Niemen and Oder; North Sea coast fringed with sandbanks and chain of islands; Baltic coast higher, with chalk cliffs. Climate varies from equable in N.W. to extreme in E.;

rainfall moderate except on highlands; lakes and large rvs. of n. frozen in winter; Baltic ports sometimes closed by ice. Agriculture is chief occupation on plain; rye, wheat, barley, oats, and potatoes are principal crops; hops in Bavaria, rape in Prussia, flax, and tobacco; most important root crop is sugar-beet in dist. w. of Magdeburg; scientific agriculture is intensively practised; fruit, especially grapes, succeed best on hill slopes of middle Rhine; many large forests.

The most important mineral products are coal, iron, and zinc. Coal is mined round Aachen, in Ruhr valley, in Saar basin (at present occupied by France), in Saxony, and in Silesia; lignite abundant; iron ore deposits in the hilly ground where Westphalia, Rhineland, and Hesse-Nassau meet, in Silesia, and in Saxony; other minerals, zinc, lead, tin, silver, bismuth, antimony, nickel, cobalt, and copper; rock salt abundant; amber obtained on Baltic coasts.

Germany has large textile manufactures in the Ruhr basin, where woollens and silks predominate, in Silesia (woollens), in Saxony (cottons); shipbuilding and marine engineering are important at ports, especially Stettin; other industries include clockmaking (Black Forest), porcelain (Meissen), making of pianos and scientific instruments; chemical industries centre in Westphalia and Saxony. Largest exports are manufactured goods of all sorts. Communications (rlys., navigable waterways, and canals) are the best in Europe. Cap. Berlin. Area (including Saar dist.) 181,723 sq. m.; pop. (including Saar dist.) 63,180,000.

Germiston, tn., Transvaal, S. Africa, 9 m. E. of Johannesburg; important rly. jn.; gold-mining centre. Pop. 30,000, including 20,500 whites.

Gerona (*hi-rô-nâ*). (1) Maritime prov., N.E. Spain, on Mediterranean Sea; wine, timber, cork; textiles; coal mines and mineral springs; fish-

ing. Area, 2,264 sq. m.; pop. 326,000. (2) Cap. of above; manufactures paper, textiles, and cork. Pop. 18,000.

Gerford's Cross, par. and vil., Bucks, England, 3 m. S.E. of Beaconsfield; residential dist. Pop. (par.) 2,500.

Gers (*zhâr*), dep., S.W. France; surface hilly, partly covered with wood and heath; chief rvs., Adour and tribs. of Garonne; live-stock and poultry; wheat, maize, oats; large area under vines; brandy and wine. Chief tn., Auch. Area, 2,428 sq. m.; pop. 196,500.

Gettysburg, bor., Pennsylvania, U.S.A., 36 m. S.W. of Harrisburg; iron mines; granite quarries in vicinity; manufactures furniture, bricks; scene of decisive battle in American Civil War (1863); battlefield now a public park. Pop. 4,500.

Gevelsberg (*gâ-fels-berg*), tn., Westphalia, Prussia, 9 m. N.E. of Barmen; small ironworks. Pop. 21,000.

Gezira (*je-zê-ra*), THE, dist., Anglo-Egyptian Sudan, between Blue Nile and White Nile; irrigated by Sennar Dam at Makwar, 170 m. S. of Khartoum; grows cotton.

Ghadam'es, tn. and oasis, Italian Libya, N. Africa, c. 300 m. S.W. of Tripoli; caravan routes converge on tn.; oasis produces dates, figs, and apricots. Pop. c. 7,000.

Ghardaia (*gar-dî'a*), oasis tn., Sahara, Algeria, 300 m. S. by E. of Algiers; caravan trade in oil, dates, ostrich feathers, and pottery. Pop. 11,000.

Ghat, oasis and tn., Fezzan, Libya, N. Africa, in Sahara desert; sandy plain with date-palms; alt. 2,400 ft.; caravan resting-place.

Ghats (*gauts*), two mt. ranges, enclosing Deccan, India; border E. and W. shores, uniting near Cape Comorin. W. Ghats extend N. to Tapti valley (1,000 m.); precipitous and unbroken line of gneiss rocks; highest peaks, 8,000 ft. in S.; principal passes, Palghat in S., Thal Ghat and Bor Ghat near Bombay. E. Ghats, in Madras Presidency; average alt., 1,500 ft.;

broken by Godavari, Kistna, and Cauvery rivs. Both ranges have health resorts.

Gharipur. (1) Dist., United Provs., India, in alluvial plain of Ganges; rice, barley, sugar-cane; one of hottest and dampest dists. in India. Area, 1,392 sq. m.; pop. 832,500. (2) Chief tn. of above, 44 m. E. of Benares; rose-water and attar of roses manufactured. Pop. 25,000.

Ghazni (*ghuz'nē*), famous city, Afghanistan; situated on high tableland (7,500 ft.) on direct road between Kabul and Kandahar; intensely cold in winter; trades in madder, wool, skins, and fruit. Pop. fluctuates with seasons, but rarely exceeds 8,000.

Gheel (*gēl*), tn., Antwerp, Belgium; noted colony for insane persons. Pop. 18,000.

Ghent (*gent*), (Fr. *Gand*), city, Flanders, Belgium, at confluence of Schelde and Lys, 32 m. N.W. of Brussels; broken up by canal into about forty islands; commerce considerable, and has increased since extension of docks and ship-canal to Terneuzen; chief industries, woollens, linen, cotton, lace manufacture, leather work, horticulture; paper mills, iron foundries, and engine factories. Pop. 163,000.

Ghizeh. See GIZA.

Giant's Castle, summit of Drakensberg range, Union of S. Africa, on frontier of Natal and Basutoland. Alt. 9,650 ft.

Giant's Causeway, group of columnar basaltic rocks on N. coast of Antrim, N. Ireland; there are c. 40,000 five or six sided columns.

Giaveno (*ja-vā'nō*), tn., Turin, N. Italy, 17 m. W. of Turin; cotton and jute factories. Pop. 12,000.

Gibraltar, rocky peninsula and Brit. crown colony, S. Spain, at most S. point of Andalusia, separated from Africa by Strait of Gibraltar, c. 16 m. wide; commands the Mediterranean gateway; connected with Spain by sandy isthmus c. 1½ m. long and ½ m. wide, middle part being neutral ground; rock rises almost precipitously 1,400 ft., with exception of W.

(3,601)

side on Bay of Gibraltar; length, 3 m. from N. to S.; breadth, ½ m.; area, 1½ sq. m.; tn. lies on W. side, with extensive barracks; cable station; powerful lighthouse on Europa Point (the S. extremity). Gibraltar is a strongly fortified naval base and coaling station; climate hot, but not unhealthy. Pop. 21,000.

Giessen (*gē'sen*), tn., N.W. Hesse, Germany; manufactures machinery, rubber, chemicals, leather. Pop. 34,000.

Giffnock, vil., Renfrewshire, Scotland, 5 m. by rail S.W. of Glasgow; residential dist.; sandstone quarries. Pop. 3,300.

Gifu (*gē'foo*), tn., central Honshu, Japan, 20 m. N. of Nagoya; silk; paper wares. Pop. 82,000.

Gijón (*hē'hōn'*), port, Oviedo, Spain, on Bay of Biscay; one of best roadsteads on Spanish coast; manufactures tobacco, earthenware, glass; coal mining; blast furnaces and petroleum refineries; exp. minerals and fruit. Pop. 58,000.

Gilan', prov., N. Persia, on S.W. Caspian Sea; forests; rice and fruits on coast; tobacco, silk; cap., Resht. Area, c. 5,000 sq. m.; pop. c. 200,000.

Gilbert Islands, archipelago, Pacific Ocean, on equator; form Brit. colony with Ellice Islands; coral reefs or atolls; barren except for coconut palms. Area, 166 sq. m.; pop. 30,000 (264 Europeans).

Gil'ersome, urb. dist., W. Riding, Yorks, England, 5 m. S.W. of Leeds; founded by Dutch settlers (1571) and so named 'Home of the Gelders'; woollens. Pop. 3,000.

Gil'ead, region, Palestine, E. of Jordan; great beauty and fertility; mountainous; average alt. 2,500 ft.

Gilgit, outlying prov., extreme N.W. of India, under sovereignty of Kashmir; embraces part of basin of R. Gilgit; mountainous country, intersected by narrow valleys and with numerous glaciers and ice-fields; separated from Chinese frontier by mt. range; people are of mixed race, speaking different languages; agricul-

ture is chief occupation; hill-station of Gilgit stands c. 4,890 ft. above sea-level. Area, c. 25,000 sq. m.; pop. c. 60,000.

Gillingham (*jil*). (1) Town, Kent, England, on R. Medway; famous cherry orchards; extensive torpedo factory and brick and cement works. Pop. 61,000. (2) Mkt. tn., N. Dorset, England, 4 m. w. of Shaftesbury; famous 'pen-pits,' probably prehistoric dwellings. Pop. 3,500.

Gilly (*zhē-yē*), tn., Hainaut, Belgium, adjoining Charleroi: coal mines; oil and nail works. Pop. 24,500.

Gilolo. See HALMAHERA.

Gioja del Colle (*jō'ya del kol'ā*), tn., Apulia, s. Italy, 22 m. s. of Bari: trade in wine, oil, almonds, wool; cattle fairs. Pop. 22,000.

Gippsland, dist., s.e. Victoria, Australia, s. of Australian Alps; mountainous in n. and e.; farming and cattle grazing in s. and w.; gold, coal. Area, 13,900 sq. m.

Girga (*gēr-gā*), or **GIRGEN**, tn., Upper Egypt, on R. Nile, 90 m. s.e. of Asyut; excellent pottery. Pop. 20,000.

Girgenti (*jēr-jen'tē*), formerly **AGRIGENTUM**, tn., s. Sicily, Italy, now assuming name **AGRIGENTO**; sulphur mining. Pop. 25,000.

Gironde (*zhē-rōnd*). (1) Estuary of united Rs. Garonne and Dordogne; largest in France; navigable for large vessels to Pauillac; obstructed by sandbanks. Length, 44 m. (2) Maritime dep., s.w. France, chief rivs., Dordogne and Garonne; surface generally flat, w. portion along sea coast consisting of sandy dunes planted with pines, and interspersed with lagoons, from which salt is obtained; extensive vineyards, some grain, vegetable, and fruit growing; chief product, wine. Chief tn., Bordeaux. Area, 4,140 sq. m.; pop. 828,000.

Girton, par. and vil., 3 m. n.w. of Cambridge, England, with college for higher education of women. Pop. (par.) 650.

Girvan, port, Ayrshire, Scotland;

summer resort; excellent bathing. Pop. 5,300.

Gisborne, port, Poverty Bay, North Island, New Zealand; Captain Cook landed here in 1769; centre of agricultural and pastoral region. Pop. 15,000.

Gisors (*zhē-sor*), tn., Eure, France, 44 m. n.w. of Paris; cloth, leather, linen, and felt. Pop. 3,000.

Giugliano (*jool-yā'nō*), tn., Italy, 6 m. n.w. of Naples; fruit and grain. Pop. 19,000.

Gurgiu (*joor'joo*), tn., Romania; river port on R. Danube; exports timber and grain. Pop. 25,000.

Givet (*zhē-vā*), tn., Ardennes, France, on R. Meuse; tanneries. Pop. 6,000.

Givors (*zhē-vōr*), town, Rhône, France, on R. Rhone; engineering, glass; manufactures hats and silk; coal mines. Pop. 14,000.

Giza, or **GHIZEH** (*gē'za*), tn., Lower Egypt, Africa, on R. Nile, 3 m. s. of Cairo; 5 m. w. are the Pyramids; Sphinx and ruins of Memphis in vicinity; bridges over Nile. Pop. 11,000.

Glace Bay (*glās*), port, Cape Breton I., Nova Scotia, Canada; coalfields; steel works; wireless station. Pop. 17,000.

Gladbach. (1) Or **BERGISCHE-GLADBACH**, tn., Rhineland, Prussia, 8 m. by rail n.e. of Cologne; iron and steel, paper, sawmills. Pop. 18,000.

(2) Or **MÜNCHEN-GLADBACH**, tn., Rhineland, Prussia, 16 m. w.s.w. of Düsseldorf; cotton, calico printing, iron, silk, boots, bricks. Pop. 115,000.

Glamis (*glāms*), vil., Angus, Scotland, 5½ m. s.w. of Forfar; castle. Pop. 1,100.

Glamorganshire, most southerly co., Wales, bounded n. by Brecon and Carmarthen, e. by Monmouth, s. by Bristol Channel, w. by Carmarthen; enormous mineral productions; n. is rugged mountainous region, with rich coalfields; in s. are fertile wooded valleys; magnificent cliff scenery on coast; rivs. Rhymney, Taff, Tawe, Neath, flow into Bristol Channel; sheep and ponies reared; dairy farm-

ing, fishing; anthracite, coking coal, ironstone, and limestone produced; tin, copper, and lead smelted; machines, chemicals, tools, paper; iron, steel, and zinc works; chief tns. include Cardiff (co. tn.), Swansea, Merthyr Tydfil, Rhondda, and Aberdare. Area, 813 sq. m.; pop. 1,225,700.

Glä'rus, canton, central Switzerland; surface mountainous, rising in s. Tödi Mts.; traversed by R. Linth; chiefly pastoral; sheep and cattle rearing, cheese making; cotton manufactures. Cap. Glarus, 33 m. s.e. of Zurich. Area, 264 sq. m.; pop. (canton) 34,500; tn., 5,000.

Glas'gow, city, Lanarkshire, Scotland, situated on both bks. of R. Clyde, c. 22 m. from estuary; second city in Brit. Isles; includes Gowan, Partick, Pollokshaws, and adjoining dists.; owes much of its prosperity and progress to its favourable position and proximity to rich fields of coal and ironstone; harbour extends from Glasgow Bridge to junction of Kelvin and Clyde, with 8 m. of quays; Clyde lined for many miles with shipbuilding yards and engineering works. Shipbuilding is the great industry—vessels of every type being built. Ironfounding of vast importance; manufactures of steam tubes, boilers, locomotives, machinery; muslin and other textiles; chemical, paper, glass, and china works; spinning, dyeing, brewing, and many other industries. Pop. 1,088,400.

Glasne'w, part of Dublin city, I.F.S.; famous botanic garden; burial-place of many noted Irishmen.

Glas'tonbury, munic. bor., Somersetshire, England, 5 m. s.w. of Wells; tradition has it that Joseph of Arimathea brought here Holy Grail and founded first Christian church in Britain; also associated with King Arthur. Ruins of 8th cent. abbey. Manufactures include mats, gloves, pottery. Pop. 4,500.

Glatz, tn., Silesia, Prussia, 50 m. s.s.w. of Breslau; machinery, textiles. Pop. 17,000.

Glauchau (glouch'ou), tn., Saxony,

Germany, 17 m. w. of Chemnitz; manufactures woollen materials, calicoes, dyes, flour, and beer; calico printing. Pop. 27,500.

Gleiwitz (gli'vits), tn., Silesia, Prussia, 43 m. s.e. of Oppeln; mining centre; iron foundries; glassworks; chemicals. Pop. 82,000.

Glenalmond (glen-a'mond), vil., Perthshire, Scotland, on R. Almond, 8 m. n.e. of Crieff; seat of Trinity College public school.

Glencoe (glen-kö'). (1) Deep valley, N. Argylshire, Scotland; scene of massacre of MacDonalds (Feb. 1692). (2) Tn., N.W. Natal, S. Africa, 6 m. w. of Dundee; rly. jn. White pop. 1,000.

Glen'dale, tn., California, U.S.A.; residential suburb of Los Angeles; manufactures pottery. Pop. 63,000.

Glendalough (glen-dal'-u), valley, Wicklow, I.F.S., 7 m. w. of Wicklow; celebrated for picturesque scenery and ecclesiastical ruins.

Glenelg', wat.-pl., on Holdfast Bay, S. Australia, 6 m. s.s.w. of Adelaide. Here (1836) S. Australia was proclaimed a Brit. colony.

Glenfin'nan, hamlet, Inverness-shire, Scotland, at head of Loch Shiel, 17 m. by rail w. of Fort William; monument erected (1815) on spot where Prince Charlie unfurled his banner in 1745.

Glengar'iff, or GLENGARRIFF, vil., on Glengariff harbour, Bantry Bay, co. Cork, I.F.S.; tourist resort.

Glenliv'et, valley, Banffshire, Scotland, 10 m. s.w. of Duftown; distillery. Pop. 1,100.

Glenmore, valley, Inverness-shire, Scotland; through Lochs Lochy, Oich, and Ness runs Caledonian Canal, connecting Atlantic Ocean with North Sea.

Glenroy, valley, Inverness-shire, Scotland, 13 m. n.e. of Fort William; famous for three natural terraces, parallel roads (at levels of 1,155, 1,077, 862 ft.), successive shore-lines of anc. lake.

Glens Falls, city, New York, U.S.A., on Hudson R.; lumber, paper, and linen manufactures. Pop. 17,000.

Glogau (*glô'gou*), tn., Silesia, Prussia, on R. Oder; wool market; lithographic works, sugar, starch. Pop. 26,000.

Glom'mea, largest riv. of Norway; flows generally s. and enters Oslo Fjord; navigable for short distance; much timber floated down it; length, 350 m.

Glos'sop, mkt. tn., Derbyshire, England, 13 m. s.e. of Manchester; cotton, woollen, and paper manufactures. Pop. 19,500.

Gloucester (*glôs'ter*). (1) City and port, cap. of Gloucestershire, England, on R. Severn; connected with Sharpness by Gloucester and Berkeley Canal (16½ m.); cathedral; ship-building, foundries, chemicals. Pop. 52,900. (2) City and port, Massachusetts, U.S.A.; excellent harbour; chief seat of cod, mackerel, and halibut fisheries in U.S.A.; granite; summer resort. Pop. 24,000.

Gloucestershire, or **GLOS**, co., England; bounded n. by Herefordshire, Worcestershire, and Warwickshire, e. by Oxfordshire, s. by Berks, Wilts, Somerset, w. by estuary of Severn and Monmouthshire. Surface is varied, with three distinct features: e., Cotswold Hills; centre, rich, fertile valleys of Severn and other rivs.; w., Forest of Dean; rivs. include Avon, Lower Avon, Wye, and Thames; extensive canal system. Sheep farming carried on in hills; in valleys pastureland, orchards, woods, and dairy farms celebrated for Gloucester cheese; in w. are coalfields of Forest of Dean and Bristol; other minerals, iron, ochre, building stone, freestone, and quartz; manufactures, woollens, cottons, silk, gloves, glass, hardware; salmon fisheries in Severn. Chief tns.: Gloucester (cap.), Cheltenham, Stroud, and part of Bristol. Area, 1,259 sq. m.; pop. 785,700.

Gloversville, city, New York, U.S.A., 45 m. n.w. of Albany; glove-making and leather-finishing factories. Pop. 23,500.

Glyncorrwg (*glin-kor'oog*), urban dist., Glamorgan, Wales, 10 m. n.e. of

Port Talbot; coal, iron. Pop. 10,200.

Gmünd, tn., Württemberg, Germany, 30 m. e.n.e. of Stuttgart; gold and silver jewellery. Pop. 20,500.

Gniezno, formerly **GNESEN**, tn., Poland, 30 m. e.n.e. of Poznan (Posen); linens and woollens. Pop. 26,000.

Go'a. (1) Portuguese terr., w. coast India, s. of Bombay, extends 60 m. along Indian Ocean; surface hilly; forests; many rivs.; manganese; exp. salt, spices, fruit, coconuts, copra. Area, 1,461 sq. m.; pop. 532,000. (2) **NEW GOA**, or **PANGIM**, cap. of above, on R. Mandavi; harbour; experimental agricultural station. Pop. 7,500.

Gobi (*gô'bê*), also called **SHAMO** (sandy desert), and **HAN-HAI** (dry sea), Chinese name for desert stretching from Pamirs on w. to Great Khingan Mts. on e., and from Altai, Sayan, and Yablonoi Mts. on n. to most northerly ranges of Kunlun Mts. on s.; c. 600 m. from n. to s., and over 1,000 m. from s.w. to n.e.; alt. between 3,000 and 5,000 ft. In some parts are grassy steppes, masses of rocks and crags, and salt lakes; forests, good water, abundant vegetation, and some animal life are found in part known as Ordos. Climate has great extremes, with rapid changes; shifting sands have buried large extent of once cultivated country, and many discoveries of buried tns. have been made; principal caravan routes lead from Kalgan (on Chinese frontier) to Urga, from Soochow to Hami, and from Hami to Peking. Area over 300,000 sq. m.

God'alming, tn., Surrey, England, 34 m. s.w. of London; paper, leather, gloves, hosiery; Charterhouse School. Pop. 10,400.

Godâ'vari. (1) Riv., Deccan, India; rises in W. Ghats, flows s.e., and enters Bay of Bengal by the seven mouths of its great delta; 900 m. long; one of twelve sacred rivers of India. (2) Dist., Madras, India, includes delta of Godavari R.; forests in

N.W.; rice, oil-seeds, tobacco, sugarcane; graphite. Cap. and port, Cocanada. Area, 2,545 sq. m.; pop. 1,500,000.

Goderich (*gōd'rich*), port, Ontario, Canada, on L. Huron; salt industry; lake fisheries; manufactures boilers and machinery. Pop. 4,500.

Go'desberg, tn., Rhineland, Prussia, on R. Rhine, 4 m. s. of Bonn; mineral springs; summer resort. Pop. 20,500.

God'havn. See DISKO I.

Godh'ra, tn., Bombay, India, 52 m. by rail N.E. of Baroda; timber; tanneries. Pop. 27,000.

God'ing. See HODONIN.

Godmanchester (*god-man-chest'er* or *gum'sester*), munic. bor., Huntingdonshire, England, on R. Ouse; noted for cheese; flour mills. Pop. 2,000.

Gods'tone, par. and vil., Surrey, England, $4\frac{1}{2}$ m. E. of Redhill; Roman remains. Pop. (par.) 2,950.

Godthaab (*got'hāb*), tn., w. Greenland; first Danish colony in Greenland, founded 1721; trading centre. Pop. c. 1,000.

God'win-Aus'ten, or DAPSANG (designated K² on Indian Survey Map), mt. peak, Mustagh Range, w. Himalayas, N. Kashmir, India; second highest peak in world (28,250 ft.).

Gog'ra, chief riv., United Provs., India; rises in Tibet; flows S.E.; joins Ganges at Chapra; navigable for 200 m.; length, 600 m.

Goll, LOCH, w. branch of Loch Long, Firth of Clyde, Scotland; length, 6 m.

Gol'borne, urb. dist., Lancs, England, 5 m. S. of Wigan; cotton manufacture and spinning; colliery. Pop. 7,300.

Golcar (*gō'kar*), urb. dist., W. Riding, Yorks, England, 3 m. S.W. of Huddersfield; woollen goods; mineral springs. Pop. 9,800.

Goleon'da, ruined city, Hyderabad, India, 7 m. W. of Hyderabad; centre of diamond cutting till 1687; now a small fortress serving as Nizam's treasury.

Gold Coast, Brit. crown colony and

protectorate, including Ashanti and N. Territories, on Gulf of Guinea, w. Africa; surrounded by French terr., Ivory Coast on W., and Togoland on E. Climate hot and moist; surface rises to plateau; covered with forests; rivs. are Volta, Aukobra, and Prah; agriculture is staple occupation; chief export cocoa; other exports, gold, manganese, diamonds, kola nuts, mahogany, palm kernels; government botanical station at Aburi; chief railways from Takoradi and Accra to Kumasi; principal trs., Accra (cap.), Cape Coast, Sekondi; chief port, Takoradi; chief tn. in Ashanti, Kumasi. Area, c. 80,000 sq. m.; pop. c. 2,300,000 (Europeans, 2,500).

Golden Gate. See under SAN FRANCISCO.

Golden Horn. See under CONSTANTINOPLE.

Gold'sboro, city and port, N. Carolina, U.S.A.; 50 m. S.E. of Raleigh; tobacco and cotton. Pop. 11,500.

Gol'spie, vil., Sutherland, Scotland, 17 m. S.W. of Helmsdale; fishing; Dunrobin Castle, seat of Duke of Sutherland, is in parish. Pop. 900.

Gomel', or HOMEL, tn., White Russia rep., U.S.S.R., 140 m. N. of Kiev; rly. jn.; agricultural machinery; sawmills. Pop. 86,500.

Gomera (*gō-mā'rā*), one of the Canary Is.; mountainous; cattle and dromedary rearing; chief port and tn., San Sebastian. Area, 144 sq. m.; pop. 23,000.

Gon'da. (1) Dist., United Provs., India; very fertile; rice, wheat, maize. Area, 2,875 sq. m.; pop. 1,500,000. (2) Chief tn. of above, 70 m. E.N.E. of Lucknow; important rly. jn.; trades in agricultural produce. Pop. 13,500.

Gondal'. (1) Indian state, Bombay, India, in Kathiawar peninsula; grain, cotton; silver and gold thread. Area, 1,024 sq. m.; pop. 167,000. (2) Cap. of above. Pop. 17,500.

Gon'dar, tn., Abyssinia, 20 m. N.E. of L. Tana; alt. 7,500 ft.; former cap.; cotton, gold, silver, and leather manufactures. Pop. 3,000.

Gondokoro, trading post, s. Anglo-Egyptian Sudan, on R. Nile; unhealthy town.

Goodwick. See **FISHGUARD**.

Goodwin Sands, dangerous shoals, off E. Kent, England; separated from mainland by the Downs; shifting sands, partly dry at low water; dangers now much reduced by lighting and buoying.

Goodwood, seat of Duke of Richmond, S. Downs, Sussex, England; famous racecourse 5 m. N. of Chichester.

Goole, mkt. tn. and port, W. Riding, Yorks, England, at confluence of R. Don with Ouse; extensive docks; iron foundries; shipbuilding, engineering, flour mills, chemical works. Pop. 20,200.

Göppingen, tn. and wat.-pl., Württemberg, Germany, 22 m. E.S.E. of Stuttgart; textiles, leather, machinery. Pop. 22,000.

Gorakhpur. (1) Dist. and div., United Provinces, India; dist. flat, abounds in lakes and marshes; dense forests; chief rivs., Rapti, Gogra, Gandak; products, timber and rice. Area, 4,535 sq. m.; pop. 3,267,000. (2) Chief tn. of above, on Rapti, 100 m. N. of Benares; large riv. trade in timber and grain. Pop. 50,500.

Gori (gō-rē'), tn., Georgia, U.S.S.R., on R. Kura, 50 m. N.W. of Tiflis; timber, corn. Pop. 10,000.

Gorinchem (gō-rink-em), or **GORKUM**, fortified tn., S. Holland, on R. Merwede, 22 m. S.E. of Rotterdam; salmon fisheries; trade in grain, hemp, cattle. Pop. 14,000.

Gorizia (gō-rīts'-a), (German *Görz*), tn., N. Italy, on R. Isonzo, 120 m. N. of Gulf of Trieste; winter resort; silk mills. Scene of severe fighting during Great War. Pop. 26,500.

Gorleston-on-Sea (gōrīst-on), wat.-pl., Suffolk (par. partly in Norfolk), England, 2 m. S. of Great Yarmouth. Pop. 20,400.

Görzitz, tn., Silesia, Prussia, on R. Neisse, 90 m. W. of Breslau; textiles, machinery, glass. Pop. 86,000.

Gor'ton, tn., Lancs, England; E. suburb of Manchester; ironworks, cotton mills. Pop. 48,500.

Górz. See **GORIZIA**.

Gosforth, urb. dist., Northumberland, England, 2 m. N. of Newcastle; annual race meeting in Gosforth Park. Pop. 18,000.

Goslar, tn., Hanover, Germany, 25 m. S. of Brunswick; silver, copper, lead, sulphur mines. Pop. 21,000.

Gosport, port, Hants, England, opposite Portsmouth, with which it is connected by floating bridge; naval depot. Pop. 37,900.

Gosselies (gōs-lē'), tn., Belgium, 5 m. N. of Charleroi; ironworks, coal mines. Pop. 10,000.

Göta (yu'ta), riv., Sweden; drains L. Vener to Kattegat; length, 68 m.; navigable throughout. Göta Canal connects Baltic and Kattegat by way of Lakes Vener and Vetter.

Göteborg (yu'te-bor), port, Sweden, on Göta riv.; large commercial and industrial centre; traversed by numerous canals; fine harbour; electric railway to Stockholm; shipbuilding, machinery, textiles, wood pulp, sugar refining, brewing. Pop. 233,500.

Götha (gō'tā), tn., W. Thuringia, Germany; manufactures sausages, toys, shoes, sugar. Pop. 46,000.

Goth'enburg. See **GÖTEBORG**.

Gotthard, St. See **ST. GOTTHARD PASS**.

Göttingen, tn., Hanover, Germany, 60 m. S. of Hanover; book trade; univ.; manufactures scientific instruments, textiles, chemicals, sugar. Pop. 41,500.

Gott'land, isl., Baltic Sea; belongs to Sweden; coast is steep; interior mostly level, with large extent of forest; agriculture, sheep and cattle raising, fishing, cement making, and lime burning. Chief tn., Visby. Area, 1,150 sq. m.; pop. 35,000.

Gou'da, or **TER GOUDWE**, tn., S. Holland, on R. Ysel; noted for cheese. Pop. 28,000.

Goulburn (gōl'burn). (1) Tn., New South Wales, Australia, 100 m. S.W. of Sydney; tanneries. Pop. 12,500.

(2) Riv., Victoria, Australia; trib. of R. Murray; irrigation works.

Gourock (*gou'rok*), tn., wat.-pl., Renfrewshire, Scotland, on Firth of Clyde; yachting centre; large steamer traffic. Pop. 8,800.

Govan (*gou'an*), par., Glasgow, Scotland, on Clyde; shipbuilding yards; engineering works; locomotive manufactures; incorporated with Glasgow (1912). Pop. 372,000.

Gow'et, or **GWYR**, peninsula, Glamorganshire, Wales; projects into Bristol Channel; chief tn., Swansea.

Gow'ria, **CASSE** or, fertile alluvial belt, on n. side of Firth of Tay, Scotland; fruit; length, 15 m.

Go'ya, tn., Corrientes, Argentina, S. America, on Paraná; pastoral dist.; commercial centre. Pop. 16,000.

Goyan'a, or **GOYANNA**, tn., Brazil, S. America, on Goyana R., 40 m. N.N.W. of Recife; sugar, coffee, rum, tobacco, cotton, hides. Pop. 54,000.

Goyas'. (1) State, Brazil, S. America, between Minas Geraes and Matto Grosso; mountainous; large tracts unexplored; forests; stock raising on campos; tobacco cultivated and gold mined; diamonds. Area, 254,834 sq. m.; pop. 640,500. (2) Cap. of above, 600 m. N.W. of Rio de Janeiro; trades in cattle, wine, cotton, coffee. Pop. 21,500.

Gozo (*gôts'ō*), isl., Mediterranean Sea, 4 m. N.W. of Malta, belongs to Britain; wheat, cotton, fruit, lace. Area, 26 sq. m.; pop. 23,000.

Graaff-Reinet (*grāf-rē'net*), tn., Cape of Good Hope prov., S. Africa, 140 m. N.W. of Port Elizabeth; alt., 2,463 ft.; vineyards and orchards; wool and mohair. Pop. 9,500, of whom half are whites.

Gräfrath (*grēf'rāf*), tn., Rhineland, Prussia, 12 m. E. of Düsseldorf; steel and iron works; silk and cotton manufactures. Pop. 11,000.

Graf'ton. (1) City, N.E. New South Wales, Australia, on Clarence R.; agricultural dist.; sugar mills. Pop. 6,500. (2) Tn., Massachusetts, U.S.A.; boots and shoes; residential suburb of Worcester. Pop. 7,000. (3) City,

W. Virginia, U.S.A., 80 m. S. of Pittsburgh; coalfield; machinery shops, iron foundries, and flour mills. Pop. 9,000.

Gragnano (*grān-yā'nō*), tn., Italy, 20 m. S.E. of Naples; trade in wine; manufactures macaroni. Pop. 15,500.

Graham Land, part of Antarctica; due S. of Cape Horn; mountainous and icebound; now believed to be a chain of islands.

Grahamstown, city, Cape Prov., S. Africa, 75 m. N.E. of Port Elizabeth; agricultural and pastoral dist.; ostrich farming; wool industry; is a health resort. Pop. 15,500 (7,650 whites).

Graian Alps (*grā'an*), portion of main Alpine chain, French-Italian frontier, between Savoy and Piedmont; peaks over 12,000 ft.

Grammichele (*grā-mē-hā'lē*), tn., Sicily, Italy, 33 m. S.W. of Catania; marble. Pop. 23,500.

Gram'plains, THE, mountains of the Central Highlands, Scotland; extends N.E. to S.W. from cos. of Banff and Aberdeen to Argyll and Dumbarton; highest summits, Ben Nevis (4,406 ft.), Ben Macdhuil, Cairntoul, Braeriach, and Cairngorm.

Gran. See **ESZTERGOM**.

Granad'a. (1) Prov., S. Spain; traversed by Sierra Nevada; fertile plains and valleys; wheat, barley, wine, sugar, fruit; textile factories, ironworks, tanneries. Area, 4,928 sq. m.; pop. 602,000. (2) Cap. of above; has the Moorish palace of the Alhambra on fortified eminence; liqueurs, textiles, paper, soap, gloves, beet sugar, olives, and cereals are produced. Pop. 108,500. (3) City, Nicaragua, Central America, on L. Nicaragua; exp. indigo, hides, cocoa, coffee. Pop. 15,000.

Gran'by, tn., Quebec, Canada, 40 m. E. by S. of Montreal; saw and grist mills; paper, wooden goods, leather, tobacco. Pop. 7,000.

Gran Cha'co, EL ('the great hunting-ground'); extensive region, central S. America; comprising parts of Bolivia, Paraguay, Argentina; traversed by Pilcomayo, Bermejo, and

other tribs. of Paraguay; surface mostly flat, with large tracts of forest, pastureland and swamp; exp. quebracho bark and extract; thinly populated by nomadic Indian tribes. Area, c. 300,000 sq. m.

Grand Bank, submarine plateau (500,000 sq. m.) extending s.e. from Newfoundland; most important cod-fishing ground in world—employs 100,000 fishermen; depth, 15 to 160 fathoms.

Grand Canal, China; extending from Hangchow to Tientsin; length, 850 m.; when constructed, Grand Canal was greatest engineering work of kind in world; fell into disuse when steam traffic was introduced.

Grand Canary, one of the Canary Islands; belongs to Spain; volcanic origin; climate healthy; chief peak, Pico del Pozos (6,400 ft.); fertile valleys; fruit and early vegetables; mineral springs. Cap. Las Palmas. Area, 550 sq. m.; pop. 130,000.

Grand Cañon, gorge in plateau region, Arizona, U.S.A.; cut out by Colorado R.; extends w. c. 220 m. from confluence of Little Colorado R.; $4\frac{1}{2}$ to 12 m. wide, and in some parts 6,000 ft. deep; walls descend in series of shelves with detached pillars and masses of rock; magnificent rock-colouring and countless side gorges.

Grand Falls, garden city, Newfoundland, on Exploits R.; founded in 1905 as centre for pulp and paper industry. Pop. 4,000.

Grand Forks. (1) Tn., s.e. Brit. Columbia, Canada, near U.S.A. boundary; gold and copper smelting works; saw and flour mills. Pop. 1,500. (2) City, N. Dakota, U.S.A., on Red R.; in wheat dist.; sugar beet; flour mills. Pop. 15,500.

Grand Island, city, Nebraska, U.S.A., 85 m. w. of Lincoln; railway works; beet-sugar factories. Pop. 14,000.

Grand Rapids. (1) City, Michigan, U.S.A., 30 m. e. of L. Michigan; furniture manufactures; flour and grist milling; foundry products; fruit growing. Pop. 169,000. (2) See WISCONSIN RAPIDS.

Grange'mouth, port, Stirlingshire, Scotland, on Firth of Forth; E. terminus of Forth and Clyde Canal; shipbuilding yards, sawmills; imports timber, pig-iron, iron ore; coal mined in vicinity; oil-pipe line from Dalmuir, on Clyde. Pop. 11,800.

Grange-over-Sands, holiday resort in Grange urb. dist., Lancs, England, on Morecambe Bay, 9 m. n.w. of Carnforth. Pop. 2,600.

Gran'ite City, city, Illinois, U.S.A., 6 m. n. of St. Louis; steel foundries; motor-cars. Pop. 25,000.

Granth'am, mkt. tn., s.w. Lincolnshire, England; rly. jn.; engines, electric plant, and agricultural machinery are manufactured; malting. Pop. 19,700.

Gran'ton, port, Edinburgh, Scotland; trawling centre; sawmills; ferry to Burntisland. Pop. 2,500.

Gran'town-on-Spey, burgh and mkt. tn., Moray, Scotland, 20 m. s. of Forres; health resort. Pop. 1,600.

Granville (1) (*gron-vêl*), Fortified port, seaside resort, Manche, France, on Gulf of St. Malo; fisheries; shipbuilding; manufacture of chemicals. Pop. 10,000. (2) (*gran'vil*), Tn., New South Wales, Australia, 12 m. w. of Sydney; rly. jn.; ironworks, flour mills, and tanneries. Pop. 18,000.

Gras'litz. See KRASLICE.

Gras'mere, vil. and small picturesque lake, Westmorland, England, in Lake District; tourist centre. Pop. 1,000.

Grasse (*grâs*), tn., Alpes-Maritimes, France, 12 m. n.w. of Cannes; manufactures essences and perfumes; winter resort. Pop. 12,000.

Grandens. See GRUDZIADZ.

Gravelines (*grâv-lên*), fortified port, Nord, France, 15 m. s.w. of Dunkirk; fisheries, shipbuilding, flax and hemp spinning, sugar refining. Pop. 2,000.

Graves'end, port, mkt. tn., munic. bor., Kent, England; part of Port of London; important shipping centre; boat building; paper making. Pop. 35,500.

Grays Thur'rock, urb. dist., Essex,

England, 3 m. n.w. of Tilbury Fort; lime, cement, bricks. Pop. 18,200.

Graz (gráts), tn., cap. Styria, S.E. Austria, on R. Mur; manufactures machinery, steel and iron ware, chemicals, soap; large riv. works. Pop. 153,000.

Greasley, par. and vil., Notts, England, 7 m. n.w. of Nottingham. Pop. (par.) 6,500.

Great Barrier Reef, coral reefs off E. coast, Queensland, Australia; length, 1,000 m.; distance from coast, 15 to 100 m.; built on former Australian coast-line; broken opposite riv. mouths by navigable channels.

Great Basin, THE, area of internal drainage, w. United States, between Wasatch Mts. and Sierra Nevada; contains Great Salt L. and Death Valley; much desert; sparse pop. Area, c. 200,000 sq. m.

Great Bear Lake, lake, Mackenzie, Canada; discharges through Great Bear R. into Mackenzie R. Area, c. 11,000 sq. m.

Great Britain, large isl. off w. coast of Europe, consisting of England, Scotland, and Wales; extreme length, c. 605 m.; breadth, c. 320 m.; most northerly point is Dunnet Head, in Caithness; most easterly, Lowestoft Ness, Suffolk; most southerly, Lizard Point, Cornwall; most westerly, Ardnamurchan Point, Argyll; total area (including I. of Man and Channel Islands), 89,041 sq. m.; total pop. 43,000,000. See BRITISH ISLES.

Great Crosby. See CROSBY.

Great Falls, city, Montana, U.S.A., on Missouri R.; rich mining region; gold, copper, and silver smelting works; great wool trade. Pop. 29,000.

Great Fish River. (1) Riv., Cape Prov., S. Africa; has tortuous course; enters Indian Ocean; mouth closed by bar; length, 230 m. (2) Or BACK'S RIVER, riv., N.W. Terr., Canada; rises on N.E. of Great Slave Lake; flows N.E. to Arctic Ocean; relics of Franklin's expedition discovered in estuary (1859); length, 440 m.

Great Grimsby. See GRIMSBY.

Great Harwood, urb. dist., Lancs, England, $4\frac{1}{2}$ m. N.E. of Blackburn; cotton mills; collieries. Pop. 12,800.

Great Lakes, THE, collective name for five fresh-water lakes—Superior, Michigan, Huron, Erie, and Ontario—situated between Canada and U.S.A.; form upper waters of St. Lawrence R. Superior, largest lake, is connected with Huron by St. Mary R.; Michigan (wholly in U.S.A.) joins Huron at Straits of Mackinac; Huron empties itself into Erie by St. Clair R. and Lake, and Detroit R.; between Erie and Ontario are Niagara R. and Falls. Lakes opened up to navigation, and differences of levels overcome by canals with numerous locks; lakes frozen for four or five months in winter; some of largest and most important tns. in N. America situated on shores; Chicago, on Michigan, and Buffalo, on Erie, share greater part of lake traffic; extensive coalfields, iron mines, fruit and grain-growing regions, especially on S. Area, 96,000 sq. m.

Great Orme's Head, headland, Carnarvonshire, Wales; lighthouse.

Great St. Bernard Pass, easiest pass over Pennine Alps (8,111 ft.); leads from Martigny in Switzerland to Italian valley of Aosta; since 12th cent. hospice has extended hospitality to travellers; St. Bernard dogs famous; carriage road across the pass.

Great Salt Lake, Utah, U.S.A., principal drainage centre of Great Basin; 4,218 ft. above sea-level; six times as salt as ocean; salt manufactured by evaporation of water; lake has no outlet; fed by Bear, Jordan, and Weber rivs.; contains several islands. Area, 1,500 sq. m., but subject to large fluctuations.

Great Slave Lake, N.W. Territories, Canada; irregular shores; numerous bays; drained by Mackenzie R.; frozen for six months annually. Length, c. 300 m.; breadth, 15 to 60 m.; area, c. 10,000 sq. m.

Greco, rep., S.E. Europe; consists of s. part of Balkan Peninsula and numerous islands—Euboea, N. Spo-

rades, Cyclades, etc., on E., Crete, Cerigo, etc., on S. Ionian Islands, on W.; bounded by Albania, Yugoslavia, and Bulgaria on N., and Turkey. Most S. part, the Morea, or Peloponnesus, is joined to mainland by narrow Isthmus of Corinth. Coasts are high, rocky, and much indented. N. part consists of Macedonia and Thrace; farther S. is Thessaly; country is traversed on W. by Pindus Mts.; along E. coast a ridge runs through Olympus, Pelion, and Euboea, enclosing plain of Thessaly; lower courses of R. Struma and Vardar in N. are in Greek terr. Climate is Mediterranean; snow lies above 4,000 ft.; rainfall heaviest on W.; marshlands are malarial. Below 1,500 ft. the cypress, myrtle, olive, and other evergreens prevail; vine, fig, orange, tobacco, cotton, and date flourish; above 1,500 ft. are oak and chestnut, beech and pine forests. Agriculture, which is backward, is predominant occupation; chief products are grapes for currants, olives, tobacco, figs; cereals are wheat, barley, rye, and maize; minerals are iron, lead, zinc, emery, magnesium, salt, and marble. Chief industries are smelting, and manufacture of textiles, olive oil, soap, leather. Exp. include currants, figs, olive oil, wines, tobacco, hides, ores, marble, and sponges. Athens is cap.; chief ports, Piræus, Salonika, Volo, Dede-Agatch. Area, 49,912 sq. m.; pop. 6,205,000.

Greeley, city, N. Colorado, U.S.A., on S. Platte riv.; coal mines; flour, sugar beet, and lumber mills. Pop. 11,000.

Green Bay, city, Wisconsin, U.S.A., on L. Michigan; coal trade; paper mills. Pop. 37,000.

Greenland, large isl., only colonial possession of Denmark; between Baffin Bay and Atlantic Ocean, N.E. of America; larger part within Arctic circle; extreme length, c. 1,650 m.; greatest breadth, c. 800 m.; interior completely buried under ice of great thickness; surface generally mountainous; highest peak, Petermann Spitze (c. 11,000 ft.), near Franz Josef

Fjord; coast-line broken by numerous bays and fjords of great depth; Disko, on W. coast, is largest of many islands; drainage mainly by enormous glaciers, and small streams of melted snow and ice; part of N.E. and N.W. coasts still unexplored. Fauna includes lemming, musk-ox, white wolf, polar bear, reindeer, fox, and hare; numerous birds; whales, seals; copse-woods on coast, where some vegetables thrive; climate colder on E. coast owing to N. polar current; W. coast washed by Atlantic water. Principal settlements on the W. are Julianehaab (most S. station), Godthaab, Godhavn, and Upernivik; on the E. Angmagssalik, Scoresby. Principal exp.: whale and seal oil, eiderdown, fox and seal skins; cryolite; cod and haddock fisheries on W. coast; trade a monopoly of Danish government. Area, c. 825,000 sq. m., of which ice-free portion is c. 50,000 sq. m.; pop. 14,500 (Eskimos and c. 300 Danes).

Greenland Sea, part of Arctic Ocean, between Spitsbergen, Norway, Jan Mayen, Iceland, and Greenland; midway between Greenland and Spitsbergen it is 2,500 fathoms deep; much fog and ice in W. portion.

Greenlaw, vil., Berwickshire, Scotland, on R. Blackadder; co. tn. till 1882. Pop. 600.

Green Mountains. See APPALACHIANS.

Greenock, port and manufacturing tn., Renfrewshire, Scotland, on Clyde estuary; sugar refining; shipbuilding, iron working; engineering works; woollen factories; rope works, tanneries; large foreign trade. Pop. 78,900.

Greenore, port and wat.-pl., Louth, I.F.S.; passenger steamer service with Holyhead, 80 m. S.E. Pop. 300.

Greensboro, city, N. Carolina, U.S.A., 70 m. N.W. of Raleigh; iron and copper mines; cotton mills, blast furnaces, tobacco and furniture factories. Pop. 53,000.

Greensburg, city, Pennsylvania, U.S.A., 30 m. S.E. of Pittsburgh; gas and bituminous coal and coke; steel manufactures. Pop. 15,000.

Green'ville, city, S. Carolina, U.S.A., 100 m. N.W. of Columbia; cotton market; textile factories. Pop. 29,000.

Greenwich (*grin'ij*), metropolitan and parl. bor., London, England; first meridian passes through Royal Astronomical Observatory, from which Greenwich time is reckoned; Royal Naval Coll. Pop. 100,900. (2) Tn., Connecticut, U.S.A.; summer resort and residential suburb of New York. Pop. 25,000.

Greeland, urb. dist., W. Riding, Yorks, England, 3 m. S.W. of Halifax; woollen manufacture. Pop. 4,300.

Greitswald (*grif's-wälf*), tn., Pomerania, Prussia, 20 m. S.E. of Stralsund; agricultural machines; surgical instruments; fish curing. Pop. 26,500.

Greis (*grits*), tn., Thuringia, Germany, 50 m. S. of Leipzig; dress fabrics; dyeing and tanning. Pop. 37,000.

Grená'da, one of Brit. W. India Islands; most southerly of Windward group; volcanic origin; crater lakes; very fertile, good climate; chief products, cocoa, fruit, spices, cotton. Cap. St. George's. Area, 133 sq. m.; pop. 66,500.

Grenadines (*gren-a-dens'*), chain of small islands, Windward group, Brit. W. Indies; extend for 60 m. between St. Vincent and Grenada; exp. cotton. Pop. 7,500, mostly on Carriacou, the chief island.

Gren'eben, tn., Solothurn, Switzerland, 16 m. N. of Berne; watch-making. Pop. 10,500.

Grenó'ble, tn., cap. Isère, France, on R. Isère; fortress; tourist centre for French Alps; manufactures kid gloves, liqueurs, cement, straw hats, silk, and linen. Pop. 78,000.

Grensmark (*grents'*), prov., Prussia, on Polish frontier, lying between Pomerania and Silesia and divided into two portions by Brandenburg; consists of the remnants of the pre-war provs. of W. Prussia and Poland; numerous small lakes; cattle; rye, potatoes. Cap. Schneidemühl. Area, 2,971 sq. m.; pop. 332,500.

Gret'na, township and par., Dumfriesshire, Scotland, on Solway Firth, and 9½ m. N.W. of Carlisle; includes Gretna Green, notorious for its run-away marriages. Pop. (par.) 3,000.

Grey'mouth, port, South Island, New Zealand, on W. coast; coal and gold. Pop. 6,000.

Grey'town. (1) Tn., Natal, S. Africa, 65 m. N. of Pietermaritzburg; mixed farming and wattle growing. Pop. 3,500. (2) Or SAN JUAN DEL NORTE, port, Nicaragua, Central America, on Caribbean Sea; exp. hides, rubber, mahogany, bananas; harbour protected by breakwater, partially silted up. Pop. c. 600.

Grims'by, or GREAT GRIMSBY, port, Lincolnshire, England, on R. Humber; great fishing port; many docks; exports coal; industries include ship-building, brewing, tanning. Pop. 92,500.

Grim'sel Pass, pass, Bernese Alps, Switzerland, between Rs. Aar and Rhone; alt. 7,100 ft.; traversed by carriage road; hospice at N. end (6,155 ft.), now submerged by the impounding of L. Grimsel for great hydro-electric scheme.

Grindelwald (*grèn-del-wälf*), vil. and mountain valley, Bernese Oberland, Switzerland; tourist resort; winter sports.

Grin'stead, EAST, urb. dist., mkt. tn., Sussex, England, 17 m. S. of Croydon; brewing; bricks and tiles. Pop. 7,500.

Grigualand East and **Grigualand West** (*grik'waw-land*), divs. of Cape Prov., Union of S. Africa. **Grigualand East**, part of Transkeian terrs., bounded by Natal, Basutoland, and Pondoland; fine pastures; exp. wool. Chief tn., Kokstad. Area, 6,602 sq. m.; pop. 265,000. **Grigualand West**, bounded by Bechuanaland, Transvaal and Orange Free State; pastoral plateau; diamond mines. Chief tn., Kimberley. Area, 15,197 sq. m.

Grisons (*grè-sôn'*), most easterly canton, Switzerland; largest, but most thinly populated; surface mountainous, with narrow valleys and

forests; contains three sources of Rhine, and Engadine or upper course of Inn; cattle breeding; maize and chestnuts; wine; mineral springs; climate severe; tourist centres, esp. at Davos, Arosa, St. Moritz, and Engadine. Chief tn., Chur. Area, 2,746 sq. m.; pop. 123,000.

Grodno, or **GARDINAS**. (1) Prov., claimed by Lithuania; partly occupied by Poland; surface flat, with pine forests and swamps; chief riv., Niemen; woollen industry. Area c. 14,900 sq. m.; pop. c. 2,000,000. (2) Fortified tn., Poland, on Niemen, in terr. claimed by Lithuania; important rly. jn.; manufactures tobacco; timber trade. Pop. 62,000.

Groningen. (1) Prov., N.E. Holland; flat, with rich pastures; climate damp; agriculture, dairy farming, and grazing; some fishing and boat building. Area, 883 sq. m.; pop. 391,000. (2) Cap. of above; connected by canals with Dollart and Zuider Zee; chief tn. of N. Holland and great trading centre; manufactures woollen goods; boat building, rope making, sugar refining, tobacco, furniture, pianos. Pop. 101,500.

Grosseto (*gròs'sà-to*). (1) Prov., Tuscany, Italy; quicksilver, timber. Area, 1,735 sq. m.; pop. 165,000. (2) Cap. of above, 90 m. N.W. of Rome; mineral springs. Pop. 22,000.

Groznyi, tn., N. Caucasian Area, Russia, on s. trib. of R. Terek; naphtha wells and refineries. Pop. 97,000.

Grudziadz (*gru'jyònts*) (Ger., *Grudenz*), tn., Poland, on R. Vistula; machinery, tapestry, cigars, flour. Pop. 35,000.

Grünberg, tn., N. Silesia, Prussia; textiles, machinery, paper; vineyards. Pop. 25,000.

Gruyère (*grü-yür*), tn., Switzerland, 16 m. S. of Fribourg; dist. gives its name to Gruyère cheese. Pop. 2,000.

Guadalsjara (*gwà-thà-là-chà'rá*). (1) Prov., Spain, on Meseta; s. fertile; traversed by R. Tagus; produce chiefly agricultural; silver and salt deposits. Area, 4,676 sq. m.; pop. 208,000. (2) Cap. of above; woollens, leather.

Pop. 14,000. (3) Tn., Jalisco, Mexico, 300 m. W.N.W. of Mexico; textiles, Indian pottery, leather. Pop. 143,500.

Guadalquivir (*gwà-thà-là-kè-vèr*), riv., S. Spain; rises in Sierra de Cazorla; flows S.W. for 360 m. into Atlantic; is navigable to Seville.

Guadeloupe (*gà-dè-loop*), two islands separated by narrow channel, Leeward Islands, W. Indies, form French colony with five isl. dependencies; climate hot but healthy; soil fertile and well cultivated; exp. sugar, coffee, cocoa, rum, bananas, vanilla. Cap. Basse-Terre. Area, 688 sq. m.; pop. 243,500.

Guadiana (*gwà-thà-á-nà*), riv., Spain and Portugal, rises in Meseta, flows into Atlantic; length, 500 m.; navigable 40 m.

Guadix (*gwà-thèch*), tn., Granada, Spain, 30 m. E.N.E. of Granada; trades in wool. Pop. 16,500.

Guaira, LA. See LA GUAIRA.

Gualeguaychú (*gwà-là-gwè-choo*), riv. port, Entre Rios, Argentina, S. America, 100 m. N. of Buenos Aires; meat products, hides. Pop. 23,000.

Guam (*gwám*), most southerly and largest of Marianas Archipelago, Pacific Ocean; belongs to U.S.A.; mountainous; well-watered, fertile; chief products, rice, maize, sugar, copra, timber. Cap. Agaña. Area, 210 sq. m.; pop. 18,000.

Guanaajuato (*gwà-nà-chu-á-tò*). (1) Inland state, Mexico; mountainous in N., fertile plain in S.; rich in minerals (gold, silver, lead, tin, iron); some cattle reared; tanneries. Area, 10,950 sq. m.; pop. 860,500. (2) SANTA FÉ DE GUANAJUATO, cap. of above; centre of mining dist.; manufactures cotton, pottery. Pop. 19,500.

Guantánamo (*gwán-tà-nà-mò*), city, S.E. Cuba, W. Indies; rich agricultural region; trade in sugar and bananas; American naval station. Pop. 30,000.

Guardafui (*gwàr-dà-fuè*), CAPE, N.E. extremity of the 'eastern horn of Africa,' at S. of entrance to Gulf of Aden.

Guardbridge, vil., Fife, Scotland, at

mouth of R. Eden, 4 m. N.W. of St. Andrews; paper mill. Pop. 770.

Guárico (*gwa-rí'kó*), inland state, Venezuela, S. America; cattle, cheese. Cap. Calabozo. Area, 25,000 sq. m.; pop. 125,500.

Guatemala (*gwa-tē-mā'lā*). (1) Rep., Central America; bounded by Mexico, Brit. Honduras, Gulf and Rep. of Honduras, Salvador, and Pacific Ocean. Surface consists of low-lying marshy plains along Pacific coast rising to Sierra Madre; many volcanoes, including Tajumulco (13,500 ft.); copious rainfall on Atlantic slope; vast forest lands; most important crop is coffee; sugar, rice, maize, and bananas also produced; gold, silver, lead, and copper mines; timber and chicle gum exported. Majority of the inhabitants are Indians; many half-castes, few Europeans. Cap. Guatemala. Area, 42,353 sq. m.; pop. 2,000,000. (2) Or GUATEMALA LA NUEVA (New Guatemala), cap. of above, on plain c. 5,000 ft. above sea-level, and 70 m. from its Pacific port, San José; centre of coffee trade. Pop. 116,000.

Guayaquil (*gwi-a-kíl'*), chief port, Ecuador, S. America; exp. cocoa, coffee, rubber, ivory nuts, Panama hats; shipyards; various manufactures; climate hot and unhealthy. Pop. 100,000.

Guayas (*gwi-ás*), coastal prov., Ecuador, S. America; most important (industrially and commercially) of the rep.; climate hot, humid, unhealthy; soil fertile; cocoa, coffee, tobacco, cane sugar, and rice. Cap. Guayaquil. Area, 8,331 sq. m.; pop. 150,000.

Gubbio (*gub-bē-ō*), city, Umbria, Italy, 20 m. N.E. of Perugia; at foot of Monte Calvo; majolica ware. Pop. (comm.) 30,500.

Guben (*gub-ben*), tn., Brandenburg, Prussia, 30 m. S. of Frankfurt-on-Oder; woollen cloth and yarn, pottery, paper. Pop. 41,000.

Guebwiller (*geb-vē-yā*), (German *Gebweiler*), tn., Haut Rhin (Alsace), France; textiles, machinery; wines. Pop. 11,500.

Guelderland. See GELDERLAND.

Guelph (*gwelf*), tn., Ontario, Canada, 40 m. W. of Toronto; market for agricultural and stock-raising dist.; flour and woollen mills; Ontario Agricultural Coll. Pop. 18,500.

Guéret (*gá-rá'*), chief tn., Creuse, central France, 48 m. by rail N.E. of Limoges; leather, hosiery. Pop. 6,000.

Guernsey (*ger-nē-zē*), second largest of the Channel Islands; climate mild; health resort; large quantities of fruit, flowers, and vegetables (esp. tomatoes and grapes); famous breed of cattle; granite quarries; fishing. Cap. St. Peter Port. Area, 25 sq. m.; pop. 40,000.

Guerrero (*ger-rí-rō*), Pacific State, Mexico; mountainous; rich in minerals, but little worked; fertile; produces coffee, cereals, tobacco, cotton. Cap. Chilpancingo; chief port, Acapulco. Area, 25,279 sq. m.; pop. 567,000.

Guiana (*gē-d'nā*), that part of S. America between Orinoco and Amazon rivs., but esp. Brit., Dutch, and French Guianas; flat, swampy tracts, with rich, fertile soil along coast; beyond this, land rises to undulating savannas, behind which are mts. covered with almost impenetrable forest; contains innumerable rivers, which form chief means of communication; larger streams are navigable up to rapids and falls; vegetation remarkably rich and luxuriant; sugar, coffee, rice, cocoa, fruits cultivated; forests yield fine timbers, balata, rubber, oil, balsams, gums, nuts; birds, particularly brilliant in plumage, include humming-birds and parrots; jaguars, tapirs, alligators, and great variety of insects; gold and diamonds are produced; inhabitants chiefly Indians, Negroes, and Europeans; climate not unhealthy though tropical.

BRITISH GUIANA, largest of the three colonies, is bounded on W. by Venezuela, S. by Brazil, and E. by Dutch Guiana; in W. are Pacaraima Mts., culminating in Mt. Roraima, on Venezuelan boundary; principal rivs.,

Essequibo, Courantine, Berbice, Demerara; rlys. connect Georgetown with New Amsterdam, and Demerara R. with Essequibo R., and line from Demerara a few miles along w. coast; principal exports, sugar, rum, rice, molasses, coffee, timber, balata, bauxite, diamonds, and gold. Chief tns., Georgetown (cap.) and New Amsterdam. Area, 89,480 sq. m.; pop. 308,000.

Dutch Guiana, or Surinam, bounded on w. by Brit. Guiana, s. by Brazil, and e. by Fr. Guiana; great extent of dense forest and unexplored country; exports sugar, rum, coffee, cocoa. Cap. Paramaribo. Area, 54,291 sq. m.; pop. 150,000.

French Guiana, or Cayenne, bounded on w. by Dutch Guiana, s. and e. by Brazil; little agricultural industry; gold mining principal occupation; Fr. penal settlement. Cap. Cayenne. Area, 34,740 sq. m.; pop. 47,500.

Guienne (*gē-er'*), anc. prov., s.w. France; now divided into depts. of Gironde, Dordogne, Lot, Aveyron, Lot-et-Garonne, and Tarn-et-Garonne.

Guildford, mkt. tn., Surrey, England, on Wey; remains of Norman keep; important rly. jn.; grain and live-stock markets. Pop. 30,800.

Guin'ea, dist., w. Africa; along shores of Gulf of Guinea; originally included the coast lands from R. Gambia to Angola (C. Negro).

Guipuzcoa (*gē-pōoth'kō-a*), maritime prov., n. Spain; surface mountainous; climate mild, healthy; fruit, maize, timber, cattle; rich in minerals (iron, zinc, lignite, copper); flourishing industries; fisheries; mineral springs. Cap. San Sebastian. Area, 728 sq. m.; pop. 291,000.

Guiseborough (*gis'bur-o*), tn., N. Riding, Yorks, England, near Middlesbrough; iron, steel, alum; ruined priory. Pop. 6,300.

Guiseley (*gis'lē*), urb. dist., W. Riding, Yorks, England, 8 m. n.w. of Leeds; woollen goods. Pop. 5,600.

Gujarat (*gooj-rāt'*), region, Bombay; comprising peninsulas of Kathiawar

and Cutch, and a strip of mainland; produces cotton, millet, pulses, winter wheat. Area, 13,579 sq. m.; pop. 3,718,000.

Gujrauwāl'a. (1) Dist., Lahore, Punjab, India; chief river, Chenab; irrigation dist.; exp. cotton and grain. Area, 2,309 sq. m.; pop. 624,000. (2) Cap. of above, 40 m. n. of Lahore. Pop. 38,000.

Gujrat (*gooj-rāt'*), tn., Punjab, India, on R. Chenab; makes cotton goods, brass-ware, and inlaid gold and silver articles. Pop. 22,000.

Gulbar'ga, tn., Hyderabad, India, 100 m. w. of Hyderabad; cotton industries. Pop. 36,000.

Gul'lane, vil., E. Lothian, Scotland, 15 m. n.e. of Edinburgh, on Firth of Forth; seaside and golfing resort. Pop. 1,500.

Gumti (*goom'tē*), riv., India; joins Ganges, 17 m. n.e. of Benares, after a general s.e. course of 500 m.

Guntur, tn. and dist., Madras, India; bounded on n. and e. by R. Kistna; cotton trade; ginning factories. Pop. (tn.) 48,000.

Güstrow (*goos'tro*), tn., Mecklenburg-Schwerin, n. Germany; ironworks; sugar, beer. Pop. 20,000.

Guth'rie, city, Oklahoma, U.S.A., 30 m. n. of Oklahoma city; fruit; dairying. Pop. 15,000.

Gwal'ior. (1) Largest Indian state in Central India; in basins of Rs. Chambal and Narbada; surface level in n., rising to Vindhya Mts. in s.; produces grain, oil-seeds, cane sugar, cotton; cotton ginning; muslins and carpets made; inhabitants mainly Hindus. Area, 26,357 sq. m.; pop. 3,186,000. (2) Ancient cap. of above, 60 m. s. of Agra; huge fortress on rock with sculptured caves. Consists of an old tn., and a new tn. known as Lashkar. Contains Maharajah's palace. Pop. 80,500.

Gwe'lo, mining centre, S. Rhodesia, S. Africa, 100 m. n.e. of Bulawayo; alt. 4,650 ft.; gold and diamonds. Pop. 1,230 whites.

Gwersyllt (*goo-er'silt*), vil. and par., Denbighshire, Wales, 3 m. n.w. of

Wrexham; coal mines in neighbourhood. Pop. (par.) 6,000.

Gyangtse (*gê-ang tse*), tn., Tibet, 10 m. s.w. of Lhasa; on important trade route from India through Sikkim; caravan centre; market for woollens.

Gympie (*gim'pi*), tn., Queensland, Australia, 90 m. N. of Brisbane; gold mining. Pop. 9,000.

Gyöngyös (*dyon-dyosh'*), tn., Hungary, 40 m. N.E. of Budapest; wine, textiles. Pop. 20,000.

Győr (*dyor*), or RAAB, tn., Hungary, 70 m. S.E. of Vienna; horse fairs; textiles; agricultural machinery. Pop. 50,000.

Gyula. See under BÉKÉS.

Gyula-Fehérvár. See ALBA-IULIA.

H

Haar'lem, tn., cap. of N. Holland, has collections in art and science, and an academy of science; textiles, printing, brewing; large trade in flower bulbs. Pop. 113,300.

Habana. See HAVANA.

Hack'ensack, tn., New Jersey, U.S.A., N.W. suburb of New York; iron foundries, silk factories; paper, jewellery. Pop. 26,000.

Hack'ney, metropolitan and parl. bor. of London, England, 3 m. N.E. of St. Paul's; formerly fashionable residential suburb. Pop. 215,400.

Had'dington, co. tn., E. Lothian, Scotland, on R. Tyne; 15th cent. church ('Lamp of Lothian'), and Knox Memorial Institute; grain mkt.; corn mills. Pop. 4,400.

Haddingtonshire. See EAST LoTHIAN.

Ha'derslev, tn., E. Schleswig, Denmark, on Haderslev Fjord; rly. jn.; tobacco, gloves; iron foundries, tanneries. Pop. 14,000.

Had'field, vil., Derbyshire, England, 1½ m. N.W. of Glossop; calico and print works. Pop. 6,000.

Hadhranaut (*hâ-dra-mout'*), prov. of s. Arabia; arid coast extends from Oman on E. to Yemen on W.; interior has fertile valleys; tobacco, frankincense, aloes, carpets, shawls. Cap. and chief port, Makalla. Pop. of prov. c. 150,000.

Had'leigh, mkt. tn., Suffolk, England, 70 m. N.E. of London; corn mills, malt houses. Pop. 3,000.

Had'ley, par. and vil., Shropshire,

England, 10 m. W. of Ipswich; coal and iron mines. Pop. 3,200.

Hagen (*hâ'gen*), tn., Westphalia, Prussia, 33 m. E. by N. of Düsseldorf; iron and steel works; textile industries; tanning, brewing, distilling. Pop. 100,000.

Hagenau. See HAGUENAU.

Ha'gerstown, city, Maryland, U.S.A., 72 m. N.W. of Baltimore; has machine shops, flour mills; furniture, chemicals. Pop. 31,000.

Hagonoy, tn., Luzon, Philippines, on Manila Bay; dist. produces rice and sugar; woven fabrics, hats; fishing. Pop. 22,000.

Hague (*hâg*), THE (Dutch, 's *Graven-hage*), cap. of Holland, 2 m. from North Sea; traversed by numerous canals; royal palace, castle of Counts of Holland (Dutch Parliament House), famous picture gallery, museums; Palace of Peace. Chief industries, copper and lead smelting, iron foundries, printing works; carriages, furniture; distilling. Pop. 425,000.

Haguensu (*hâ'gen-ow*), tn., Bas Rhin (Alsace), France, on R. Moder; textiles, porcelain, soap, beer. Pop. 14,000.

Haidarabad. See HYDERABAD.

Haifa (*hî'fâ*), port, Palestine, on Bay of Acre, at foot of Mt. Carmel; manufactures cement and soap; exports wheat. Pop. 25,000.

Hails'ham, mkt. tn., Sussex, England, 7 m. N. of Eastbourne; bricks, pottery; trade in agricultural produce. Pop. 4,900.

Hainan (*hi-nan'*), isl. in prov. of Kwang-tung, extreme s. of China, between China Sea and Gulf of Tongking; extending c. 150 by c. 100 m. Centre and s. are mountainous, densely wooded, yielding camphor, mahogany, rosewood; agriculture in coastal valleys, rice being main crop; stock raising; earthquakes and typhoons occur. Cap. Kiang-chow (with port Hoi-how). Area, c. 1,300 sq. m.; pop. c. 2,000,000.

Hainaut (*ā-nō'*), prov., Belgium; surface generally level, broken by spurs of Ardennes; traversed by Rs. Sambre, Schelde, Dender, and Haine; rich coalfields and iron mines; fertile soil. Cap. Mons. Area, 1,437 sq. m.; pop. 1,263,000.

Haiphong (*hi-fong'*), chief port, Tongking, Fr. Indo-China, on branch of Red R. delta; cotton thread, soap, oil. Pop. 20,000.

Haiti (*hā'ti*) or **HAYTI**. (1) Second largest isl. in W. Indies, separated from Cuba by Windward Passage, and from Porto Rico by Mona Passage. Surface is mountainous, highest peak Loma Tina (10,300 ft.). Mts. are covered with pine, oak, and other forests—much valuable timber being produced. Rivers are not navigable; many large lakes. Earthquakes frequent and hurricanes common; climate hot in low-lying parts, healthful elsewhere. Cotton, cocoa, tobacco, sugar, coffee are cultivated. Minerals as yet undeveloped. Isl. is divided into two republics—Haiti in w., and Santo Domingo in e. Area of isl., 29,536 sq. m.; pop. 3,197,600. (2) **REPUBLIC**, w. third of above isl.; formerly French colony, became rep. in 1804; under U.S.A. supervision since 1916. Chief products, coffee, cotton, sugar, cocoa, tobacco. Cap. and chief port, Port au Prince. Area, 10,204 sq. m.; pop. 2,300,000.

Hakodate (*ha-ko-dā'tā*), port, Hokkaido, Japan, on bay of Hakodate; splendid harbour; great fishing centre; exports sulphur, dried fish, beans, peas, timber, furs. Pop. 164,000.

Hal, tn., Brabant, Belgium, on R. Senne; sugar, paper, porcelain. Pop. 16,000.

Halberstadt, tn., Saxony, Germany, 29 m. s.w. of Magdeburg; sugar, cigars, machinery, paper, leather goods. Pop. 48,000.

Hal'den, formerly FREDRIKSHALD, tn., s. Norway, near Swedish boundary; wood pulp and paper mills, boots, shoes. Exp. granite. Pop. 11,000.

Hale, urb. dist., n. Cheshire, England, adjoining Altrincham. Pop. 10,700.

Haleb. See ALEPPO.

Halesowen (*hāls-ō'en*), urb. dist., Worcestershire, England, 7 m. s.w. of Birmingham; agricultural implements; iron and steel works; rails, chains. Pop. 31,100.

Halesworth, urb. dist., Suffolk, England, 9 m. s.w. of Beccles; mkt. tn. Pop. 2,000.

Halfa. See WADI HALFA.

Halifax. (1) Co. bor., W. Riding, Yorks, England, on R. Calder; woollens and worsteds, also carpets, cotton, iron, and steel. Pop. 98,100. (2) Cap., Nova Scotia, Canada; e. terminus of Canadian National Rlys.; fine harbour, open all the year round; iron foundries, machinery, furniture, boots and shoes; large sea trade, especially in fish, apples, lumber, and agricultural produce. Seat of Dalhousie Univ. Pop. 58,000.

Halle (*hā'le*), tn., Saxony, Prussia, on R. Saale, 20 m. n.e. of Leipzig; flourishing Hanse town in Middle Ages; famous univ.; oldest industry is salt production; paraffin and sugar refining, engineering; printing and publishing. Pop. 195,000.

Halmahé'ra ('great land'), or **GILLOLO**, isl., Dutch E. Indies, e. of Celebes; consists of four peninsulas, each traversed by well-forested mountain chain 3,000 to 4,000 ft. high; several active volcanoes; sago, spices, coconuts; trepang and pearl shells. Area, 6,500 sq. m.; pop. 103,000.

Halm'stad, port, Sweden, on Kattegat, 76 m. s.s.e. of Göteborg; brew-

eries, cloth manufactures, sawmills; salmon fishing; exports granite, wood pulp, timber. Pop. 23,000.

Halstead, mkt. tn., Essex, England, on R. Colne; silk and crape mill. Pop. 5,900.

Haltwhistle, mkt. tn., Northumberland, England, 13 m. w. of Hexham; collieries. Pop. 3,900.

Ham, East. See EAST HAM.

Ham, West. See WEST HAM.

Hamadan, tn., Persia, 185 m. s.w. of Tehran; important entrepôt of trade; extensive manufactures of leather, rugs, shellac. Pop. 30,000.

Hamburg, free city and state, Germany, on N. branch of R. Elbe; second city of Germany; greatest port and commercial town on Continent. Old town intersected by canals, and surrounded by fine promenades. Docks cover huge area; part of harbour is a free port. Trades chiefly with Britain and America; chief exports: iron and steel, machinery, chemical manures, china and glassware, sugar, paper; chief manufactures are foodstuffs, beer, tobacco; shipbuilding, machinery, motor-cars, chemicals, furniture, musical and scientific instruments. Important schools of navigation and commerce. Hamburg state (area, 158 sq. m.) includes Bergedorf and Cuxhaven. Land produces cereals, vegetables, fruit, potatoes. University founded (1919). Pop. (city) 1,079,000; (state) 1,134,000.

Hameln, tn., Hanover, Prussia, at junction of Rs. Hamel and Weser; famous for mediæval buildings and legend of Pied Piper; sugar, distilling, papermaking. Pop. 26,000.

Hami (*hāmī*), tn., Sinkiang, China, just w. of Gobi Desert; important trading centre. Pop. c. 6,000.

Hamilton. (1) Munic. bur., Lanarkshire, Scotland, 10 m. s.e. of Glasgow; centre of rich iron and coal field; iron and brass foundries; cotton mills. Pop. 37,900. (2) City, Ohio, U.S.A., 20 m. n. of Cincinnati, on Great Miami R.; tobacco, hay, grain, vegetables; paper, safes, locks, steam pumps. Pop. 32,000. (3) City,

Ontario, Canada, at w. end of Lake Ontario, 40 m. s.w. of Toronto; in 'garden of Ontario'; fruit-raising dist.; great transport facilities; varied metal manufactures, especially agricultural implements. Pop. 127,000.

(4) Tn., Victoria, Australia, on R. Wannon, 198 m. w. of Melbourne; agricultural centre, butter factory and meat-preserving works. Pop. 5,200.

Hamm, tn., Westphalia, Prussia, on R. Lippe, 18 m. n.e. of Dortmund; iron foundries, wireworks; brushes, baskets, oil, varnish; thermal baths. Pop. 50,000.

Hammfest, port, Norway, on island of Kvalø; the most northerly town in Europe; exports fish, fish oil, hides, and down. Pop. 3,500.

Hammersmith, metropolitan bor., on n. side of R. Thames; part of w. London; iron, motor, and dye works; lead and oil mills. Pop. 135,500.

Hammond, city, Indiana, U.S.A., on R. Calumet, 18 m. s.e. of Chicago; iron and railway industries; book-binding. Pop. 65,000.

Hampshire, SOUTHAMPTONSHIRE, OF HANTS, mar. co., s. England, bounded n. by Berks, w. by Wilts and Dorset, s. by Eng. Channel, e. by Sussex and Surrey. Isle of Wight is included in county, but is distinct from it for administrative purposes. On coast are Portsmouth Harbour and Southampton Water; inland are fertile valleys, hills, and woods; crossed by North Downs, in n.w. and w.; w. of Southampton Water is New Forest. Principal rivers, Lymington, Test, and Itchen, famous trout streams. Agriculture, sheep, cattle, and horse rearing, fishing, shipbuilding, brewing, tanning are carried on. Chief tns., Southampton (co. tn.), Portsmouth, and Winchester; many seaside resorts; Aldershot, military training centre. Area, 1,645 sq. m.; pop. (including Isle of Wight) 1,102,500.

Hampstead, n.w. residential suburb of London; *Hampstead Heath* is a popular pleasure ground. Pop. 88,900.

Hampton, urb. dist., Middlesex,

England; part of Greater London, on R. Thames. *Hampton Court*, a former royal residence; fine gallery of paintings. Pop. 13,100.

Hanan (*hā'nan*), tn., Hesse-Nassau, Prussia, on R. Main; gold and silver work; diamond cutting; brewing; chemicals, hats, gloves. Pop. 38,500.

Hands' worth. (1) N.W. suburb of Birmingham, Warwickshire, England. Pop. 75,000. (2) Urb. dist., Yorks, England, 4 m. S.E. of Sheffield; collieries and quarries. Pop. 16,000.

Hangchow, port, Chekiang, China, on Tsien-Tang R.; centre of silk manufacture; rice mills; trading centre; univ. Pop. 427,000.

Hank'o, port, Finland, 50 m. S.W. of Helsinki; exports butter, wood, paper; seaside resort. Pop. 7,000.

Hankow, riv. port, Hupeh, China, on R. Han, at junction with Yangtze Kiang; accessible to ocean steamers; large transit trade; centre of commerce and finance; iron and steel works; textiles; rice, oil, and flour mills. Pop. c. 1,500,000.

Han'ley, tn., Staffordshire, England, part of Stoke-upon-Trent; extensive potteries; coal and iron mines. Pop. 78,000.

Han'ibal, city, Missouri, U.S.A., on Mississippi R.; exports lumber, agricultural produce; flour mills, tobacco factories. Pop. 20,000.

Hanoi, cap. of Tongking and of French Indo-China, on Songkoi or Red R.; silks, cottons, furniture, matches, tobacco, pottery. Pop. 103,000.

Han'over. (1) Maritime prov., N.W. Prussia, traversed by Harz Mountains in S.E.; remainder forms part of great N. German plain, with immense stretches of heath; chief rivs., Elbe, Weser, Ems; numerous canals; well-cultivated in more fertile areas; rye, flax, potatoes, hops, tobacco, beet; minerals include coal, salt, silver, copper, iron ore, lead, asphalt; sheep, cattle, and horses reared; famous poultry rearing (esp. geese); principal tns., Hanover (cap.), Hildesheim, Osnabrück, Göttingen. Area, 14,898 sq. m.; pop. 3,191,000. (2) Cap. of

above, on R. Leine; fine parks and suburbs, picture galleries, museums, libraries; hardware, chemicals, machinery, pianos, tobacco, rubber. Pop. 423,000.

Han'thawaddy, dist., Lower Burma, India; great plain in which rice is largely grown. Chief tn., Rangoon. Area, 1,866 sq. m.; pop. 492,000.

Han'well, urb. dist., part of Greater London, 10 m. W. of St. Paul's; electric material and furniture; mental hospital. Pop. 21,000.

Han-yang, city, Hupeh, China, at junction of R. Han with Yangtze Kiang; ironworks. Pop. 450,000.

Har'ar, prov. and tn., Abyssinia, 230 m. E. of Addis Ababa; prov. is fertile and produces much coffee; tn. trades in durra, skins, hides, ivory, cattle, and mules. Pop. (tn.) 40,000.

Har'bin, tn., central Manchuria, China, on R. Sungari; important rly. jn.; flour mills, soya bean works, distilleries, tanneries. Pop. c. 200,000.

Harbour Grace, tn., Newfoundland, 24 m. W. by S. of St. John's; has large but exposed harbour; trades in furs, fish, cod-liver oil. Pop. 3,800.

Har'burg, port, Hanover, Prussia, on R. Elbe; manufactures palm oil, rubber goods, chemicals; brewing and shipbuilding. Pop. 73,000.

Har'danger Fjord, inlet on W. coast, Norway, S. of Bergen; magnificent scenery; tourist resort.

Har'doi. (1) Dist., United Provinces, India; much of it jungle. Area, 2,331 sq. m.; pop. 1,092,800. (2) Cap. of above, 60 m. N.W. of Lucknow; saltpetre works, wood carving; exp. grain. Pop. 14,000.

Har'dwar, tn., United Provinces, India, on R. Ganges, 110 m. N.N.E. of Delhi; place of pilgrimage; every twelfth year a sacred festival is held. Pop. 30,000.

Harefield, vil., Middlesex, England, 4 m. N. of Uxbridge; asbestos works. Pop. 3,000.

Harflour (*ar-floor*), port, Seine-Inférieure, France, 5 m. E. of Havre; potteries, distilleries, chemical works. Pop. 3,300.

Hari-Rud (rood), riv., Asia, rises on w. slope of Hindu Kush; flows w. through Afghanistan, turns n., finally losing itself in Tejed sands, w. of Merv. Length, c. 650 m.

Har'lech, tn., Merionethshire, N. Wales, on Irish Sea; tourist centre. Pop. 1,100.

Har'lingen, port, Friesland, Holland, on Zuider Zee; exp. dairy and farm produce; flax, fish. Pop. 10,000.

Harlow, anc. mkt. tn., Essex, England, on R. Stort, 5 m. n. of Epping; annual fair. Pop. 3,000.

Har'penden, urb. dist., Herts, England, 5½ m. s. of Luton; agriculture; hats. Pop. 8,300.

Harrington, urb. dist., Cumberland, England, 2 m. s. of Workington; coal mined and exported. Pop. 4,100.

Harris. See LEWIS-WITH-HARRIS.

Har'risburg, city, Pennsylvania, U.S.A., on Susquehanna R.; beautiful scenery; handsome capitol; manufactures machinery and other steel and iron goods; flour, shoes, cigarettes, and cotton goods. Pop. 80,000.

Har'rismith, tn., Orange Free State, S. Africa, 54 m. n.w. of Ladysmith; wool and hides; woollen factory; health resort. Pop. 2,500 whites.

Har'ri-son, tn., New Jersey, U.S.A., on Passaic R., opposite Newark; iron, steel, and brass manufactures. Pop. 17,000.

Har'rogate, tn., W. Riding, Yorks, England, 15 m. n. of Leeds; health resort, noted for saline, chalybeate, and sulphur springs. Pop. 39,800.

Har'row-on-the-Hill, tn., Middlesex, England; a n.w. part of Greater London; famous public school founded by John Lyon (1571); printing works. Pop. 26,400.

Hart'ford, cap. of Connecticut, U.S.A., at head of navigation of Connecticut R. Buildings include state capitol, Trinity Coll. on outskirts; manufactures small arms, machines, hardware, typewriters, electric appliances, aeroplanes, silver plate; tobacco. Pop. 164,000.

Hart'lepool, port, co. Durham,

England, including munic. bor. of Hartlepool and co. bor. of W. Hartlepool. Large trade; engineering works, shipbuilding, iron and brass foundries, flour and paper mills, soap works. Pop. 88,700 (including W. Hartlepool, 68,100).

Har'wich (har'ich), port and wat.-pl., Essex, England; packet station for Holland; fine docks; large export and import trade; manufactures of cement and fertilizers. Pop. 12,700.

Harzburg (harts'boorg), tn., Brunswick, Germany, on n. side of Harz Mts., 26 m. s. of Brunswick; health resort with mineral springs; manufactures jewellery. Pop. 6,200.

Harr Mountains (harts), mt. range, Germany, extending through part of Prussia, Brunswick, and Anhalt; s. slopes well forested; highest peak, Brocken (3,745 ft.), ascended by railway; rich in iron, copper, lead, silver, sulphur; numerous mineral springs. Length, 57 m.; breadth, 20 m.; area, 784 sq. m.

Hasa, At., E. coast dist., Nejd, Arabia, on Persian Gulf; dates, pearls; white donkeys. Area, c. 30,000 sq. m.; pop. c. 150,000.

Has'kovo. See KHASKOVO.

Has'land, par. and vil., Derbyshire, England, 2 m. s.e. of Chesterfield; coal and ironstone. Pop. 3,000.

Haslemere (hā'sel-mēr), tn., Surrey, England, 12 m. s.w. of Guildford; residential centre. Pop. 4,300.

Has'lingden, tn., Lancs, England, 8 m. n. by w. of Bury; cotton goods; coal mines, ironworks. Pop. 16,600.

Haspe (has'pe), tn., Westphalia, Prussia, 10 m. n.e. of Barmen; iron, steel, and hardware. Pop. 26,000.

Has'san, dist., Mysore, India; prod. coffee, cereals. Chief tn., Has-san, 60 m. n.w. of Mysore. Area, 2,665 sq. m.; pop. 584,000.

Has'selt, tn., Limbourg, Belgium; distilleries and breweries. Pop. 21,200.

Hastings (hāst'ings). (1) Co. bor., Sussex, England; fashionable wat.-pl. and one of Cinque Ports; anc. castle and churches; joined to St.

Leonardis, now incorporated with Hastings. Small shipbuilding and fishing industry. Pop. 65,200. (2) Tn., North Island, New Zealand, 12 m. s.s.w. of Napier; gelatine and refrigerating works. Severe earthquake, 1931. Pop. 15,500.

Hatch End, hamlet, Middlesex, England, 2 m. s.w. of Harrow; part of Greater London; coal wharf. Pop. 3,000.

Hatfield, or **BISHOP'S HATFIELD**, mkt. tn., Herts, England, on R. Lea, 17½ m. by rail N. of London; rly. centre; Queen Elizabeth was a prisoner in the old palace before her accession to the throne. Hatfield House, the seat of the Earl of Salisbury, contains many historical documents. Pop. 5,800.

Hatfield, par. and vil., Derbyshire, England, on R. Derwent, 10 m. N. of Bakewell; gritstone quarries; pins and steel wire; pre-Roman remains in vicinity. Pop. 2,000.

Hathras, tn., United Provs., India, 21 m. S. of Aligarh; exports sugar, grain, cotton, oil-seeds, and ghee; noted for carved work. Pop. 39,000.

Haterras, CAPE, low promontory, N. Carolina, U.S.A.; on sandbank; violent storms make navigation difficult.

Hattiesburg, tn., Mississippi, U.S.A., 105 m. N.E. of New Orleans; hardware; turpentine resin. Pop. 13,000.

Hattingen, tn., Westphalia, Prussia, on R. Ruhr; iron and steel manufactures; tobacco. Pop. 14,000.

Haugesund (*how'-ge-zoon'd*), port, Norway, 35 m. N. of Stavanger; fishing centre for herring, lobsters, and mackerel; woollen goods and margarine. Pop. 17,000.

Haute-Garonne (*ôt-ga-ron'*), dep., s.w. France, crossed by R. Garonne; produces timber, cereals, wine, and fruit; dairy farming; white marble quarries; mineral springs. Chief tn., Toulouse. Area, 2,457 sq. m.; pop. 425,000.

Haute-Loire (*ôt-lwâr*), dep., s.e. France; surface mountainous; crossed by R. Loire; coal, timber, cereals,

lace, silk, paper. Chief tn., Le Puy. Area, 1,930 sq. m.; pop. 269,000.

Haute-Marne (*ôt-marn'*), dep., N.E. France; surface slopes upwards from N. to plateau of Langres in S.; crossed by R. Marne; one-fourth covered by forests; cereals, vegetables, wine, and iron. Chief tn., Chaumont. Area, 2,420 sq. m.; pop. 199,000.

Hautes-Alpes (*ôtz-alp'*), dep., S.E. France; mountainous in E.; lower valleys have Mediterranean type of vegetation; drained by R. Durance; sheep and cattle are raised. Chief tn., Gap. Area, 2,178 sq. m.; pop. 89,300.

Haute-Saône (*ôt-sôn'*), dep., E. France; crossed by R. Saône; nearly half surface under cultivation; cereals, cherries, apples, plums, tobacco; iron, steel, and copper works, cotton manufacture; coal mined at Ronchamp. Chief tn., Vesoul. Area, 2,074 sq. m.; pop. 228,300.

Haute-Savoie (*ôt-sa-vvâ'*), dep., E. France; mountainous; beautiful scenery; white wine; little agriculture; cattle, poultry; cheese. Chief tn., Annecy. Area, 1,774 sq. m.; pop. 236,000.

Hautes-Pyrénées (*ôt-pê-nâ-nâ'*), dep., s.w. France; southern part includes central group of Pyrenees; principal rivs., Gave de Pau, Adour, and Neste; mineral springs abound; lead, zinc, marble worked; cattle, sheep, horses; fruit growing and wine. Chief tns., Tarbes, Lourdes. Area, 1,750 sq. m.; pop. 186,000.

Haute-Vienne (*ôt-vê-en'*), dep., central France, crossed by R. Vienne, Isle; produces fruits, cereals, porcelain; chestnuts largely grown; cattle and sheep reared. Chief tn., Limoges. Area, 2,119 sq. m.; pop. 350,200.

Hautmont (*ô-mon'*), tn., Nord, France, 18 m. S.E. of Valenciennes; sugar, glass, pottery. Pop. 15,000.

Haut-Rhin. See ALSACE-LORRAINE.

Havāna, or **HABANA**, cap. and port of Cuba, on N. coast; chief commercial city of W. Indies. Consists of old or inner town and well-laid-out new part. State univ.; splendid har-

bour with strong fortifications; chief industries: Havana cigars, sugar, chocolate, coffee, rum, molasses, woolen fabrics, and straw hats. Pop. 581,100.

Havant, mkt. tn., Hants, England, 6 m. N.E. of Portsmouth; brewing, tanning; small trade in timber and coal. Pop. 4,300.

Hä'vel, riv., Prussia; rises in Mecklenburg; joined by R. Spree at Spandau; unites with R. Elbe above Wittenberge. Length, 220 m. Partly canalized.

Haverfordwest (or *här'ford-west*), port and mkt. tn., Pembroke, S. Wales; picturesque town built round castle; agricultural produce. Pop. 6,100.

Haverhill. (1) (*häv'ril*) City, Massachusetts, U.S.A., 33 m. N. of Boston; boots and shoes; woollens; bricks. Pop. 49,000. (2) (*hä'ver-il*) Mkt. tn., Suffolk, England, on s.w. border; textiles, horse-hair cloth. Pop. 3,800.

Havre (*ä'vr*), or LE HAVRE DE GRACE, second port of France, on estuary of R. Seine; large ship-building yards; ropes, wire, machinery, oils, chemicals, cotton goods; petroleum pipe line to Paris. Pop. 158,000.

Hawaiian Islands (*ha-wä'i-ä-an*), called SANDWICH ISLANDS by Captain Cook, in midst of N. Pacific Ocean, form a terr. of U.S.A. There are twelve islands (eight inhabited), stretching 300 m. E.S.E. to W.N.W. The inhabited islands are: Hawaii (4,015 sq. m.), Maui, Oahu, Kauai, Molokai, Lanai, Niihau, Kahului. Hawaii has Mauna Loa ('Great Mt.'), the largest volcano in the world, still active, and extending about 75 by 50 m., and over 13,600 ft. in height; also Mauna Kea ('White Mt.'), 13,825 ft. About 16 m. S.E. lies hill called Kilauea, with crater over 8 m. in circumference. Maui (728 sq. m.) has two large mts., one of which, Mauna Haleakala (c. 10,030 ft.) has largest pit-crater in world (c. 19 sq. m. in area). Molokai, a small mountainous island, has a leper settlement. Climate is cool and healthy. There

are large quantities of pumice, sandstone, sulphur; considerable forests, and soil is highly fertile. Irrigation is extensively used. Sugar and pineapples are most important products; coffee, honey, hides, fruit, rice, bananas, tobacco, cotton also exported. Stock ranching and dairy farming. Honolulu, cap. of the group, lies on S. coast of Oahu. Total area, 6,449 sq. m.; pop. 256,000.

Hawarden (*häv'den*), mkt. tn., Flint, N. Wales, 6 m. W. by S. of Chester; coal mines, clay fields; iron, and chemical works. Pop. 8,000.

Hawick, burgh, Roxburghshire, Scotland, on R. Teviot; hosiery, tweeds, blankets; dyeworks, tanneries; large live-stock sales. Pop. 17,100.

Hawkhurst, tn., Kent, England, 12 m. S.E. of Tunbridge Wells; hop growing. Pop. 3,100.

Hä'worth, urb. dist. and tn., W. Riding, Yorks, England, 4 m. S.S.W. of Keighley; worsted, alpaca, and mohair factories. Residence of Brontë family. Pop. 5,900.

Haydock, tn., Lancs, England, 3 m. N.E. of St. Helens; iron working and coal mining. Pop. 10,400.

Hayes and Harlington, urb. dist., W. Middlesex, England; part of Greater London. Pop. 23,600.

Hayle (*hail*), or HEYL, urb. dist. and port, Cornwall, England, 4 m. S.E. of St. Ives; engineering, shipbuilding; roperies; coal, iron, timber, and grain imported. Pop. 900.

Hayling Island, isl., Hants, England, in S.E. of co.; seaside resort with fine sands; rly. bridge to mainland. Length, 4 m.; breadth, 1½ m.

Hayward's Heath, urb. dist., Sussex, England, 13 m. N. of Brighton; large cattle sale. Pop. 5,400.

Hazira, dist., N.W. Frontier Prov., India; lies between mountain ranges; bounded on W. by R. Indus, sheep and cattle raised; important forests. Area, 3,391 sq. m.; pop. 560,000.

Hazaribagh (*ha-zä-rä-bag'*), dist., Bihar and Orissa, India; important coal and mica-producing area. Cap.

Hazaribagh, 210 m. N.W. of Calcutta. Area, 7,020 sq. m.; pop. 1,277,000.

Hazebrouck (*az-brook'*), tn., Nord, France, 25 m. S. of Dunkirk; rly. jn.; textiles; trade in grain and live-stock. Pop. 12,000.

Ha'zel Grove and Bramhall, urb. dist., N.E. Cheshire, England, 2½ m. S.E. of Stockport; famous manor-house. Pop. 13,300.

Ha'zleton, tn., Pennsylvania, U.S.A., 34 m. S.S.W. of Scranton; centre of rich coal dist.; textiles, iron, sheet steel. Pop. 39,000.

Head'ington, par. and vil., Oxfordshire, England, 2½ m. E. of Oxford; building-stone quarries; favourite walk for Oxford students; hunting lodge of Saxon kings. Pop. (par.) 7,000.

Hean'or (or *hā'nor*), mkt. tn. and urb. dist., Derbyshire, England, 10 m. N.W. of Nottingham; coal, iron, and hosiery. Pop. 22,400.

Heart's Content, port, Avalon Peninsula, Newfoundland, 40 m. N.W. of St. John's; terminus of three Atlantic cables; excellent harbour; shipbuilding, fishing. Pop. 1,100.

Heath'field, par. and vil., Sussex, England, 8 m. N. of Hailsham; chicken rearing for London market. Pop. (par.) 6,000.

Heaton Norris, tn., Lancs, England; suburb of Stockport; iron, cotton, thread; bleaching. Pop. 11,000.

Heb'burn, tn., Durham, England, on R. Tyne, 4 m. N.E. of Gateshead; shipbuilding, engineering, cement, chemicals, ropes and sails. Pop. 24,100.

Heb'den Bridge, tn., W. Riding, Yorks, England, 9 m. N.W. of Halifax; textiles, dyeworks, foundries. Pop. 6,300.

Hebrides (*heb're-dēz*), or **WESTERN ISLES**, large group of islands extending over 200 m. along W. coast of Scotland; divided by Little Minch into *Outer Hebrides* (Lewis and Harris, N. Uist, Benbecula, S. Uist, and Barra) and *Inner Hebrides* (Skye, Rum, Eigg, Coll, Tyree, Mull, Staffa, Iona, Colon-

say, Jura, and Islay). Scenery is wild and picturesque; climate mild and moist; industries: sheep rearing, fishing, home-spun tweeds, distilling. Large deer forests. Area, 2,812 sq. m.; pop. 70,500.

Hebrides, New. See **NEW HEBRIDES**.

He'bron, tn., Palestine, 20 m. S.S.W. of Jerusalem; contains traditional tomb of Abraham and other patriarchs. Modern city is called El Khalil, and manufactures glass and leather water-skins. Pop. 16,600.

Heek'mondwike, tn., W. Riding, Yorks, England, 10 m. S.W. of Leeds; blankets, woollens, carpets, rugs. Pop. 9,000.

Hed'on, bor., E. Riding, Yorks, England, 5 m. E. of Hull; formerly important seapt., now inland; famous church. Pop. 1,500.

Heerlen (*hār-len*), tn., Limburg, Holland, 9 m. N.N.W. of Aachen; in centre of new coalfield. Pop. 42,000.

Heidelberg (*hi'del-berg*). (1) City, Baden, Germany; beautifully situated on R. Neckar, surrounded by hills covered with forests and vineyards; anc. castle, with great vat capable of holding 50,000 gallons of wine; celebrated univ. (1385); beer, wine, and book industry; scientific instruments. Pop. 73,000. (2) Tn., Transvaal, S. Africa, 30 m. S.E. of Johannesburg; sanatorium. Pop. 3,500.

Heidenheim (*hi'den-him*), tn., Württemberg, Germany, 20 m. N.N.E. of Ulm; textiles, brewing, tobacco, dyeworks. Pop. 19,000.

Heilbron (*hi'bron*), div. and tn., Orange Free State, S. Africa, 75 m. S. of Johannesburg; coal mines; livestock and maize. Pop. (tn.) 2,000.

Heilbronn, tn., Württemberg, Germany, on R. Neckar; gold, silver, and iron articles, machinery, motor-cars, beer, tobacco, chemicals. Pop. 46,000.

Hejaz (*hek'az*), former kingdom, Arabia, on shores of Red Sea, now incorporated with Nejd. Almost all stony desert; in S. some cultivation, dates, wheat, and barley being chief

products. Contains sacred cities of Mecca and Medina; chief seaports, Jidda and Yambu. Area, c. 150,000 sq. m.; pop. 800,000.

Hek'la ('mantle' or 'cap'), active volcano, Iceland, near s.w. coast, 5,108 ft. high.

Hel'der, fort. port, s. Holland, at w. entrance to Zuider Zee; protected against sea by embankments of enormous strength; prov. can be flooded from here. Pop. 30,000.

Hel'ena. (1) Cap. of Montana, U.S.A., centre of dist. rich in gold, silver, and iron, and in agricultural produce; smelting, quartz-mills. Pop. 14,000. (2) City, Arkansas, U.S.A., on R. Mississippi; head of ocean-going navigation; exports cotton and lumber. Pop. 9,000.

Hel'ensburgh, tn. and wat.-pl., Dumbartonshire, Scotland, on Firth of Clyde; mainly residential; close by is Craigendoran pier for Clyde steamer traffic. Pop. 8,900.

Hel'icon, mountain range, Boeotia, Greece; traditional home of Muses.

Hel'igoland, or **HELGOLAND**, isl., North Sea, 28 m. from mouth of R. Elbe; contains land-locked harbour capable of sheltering large ships; seaside resort. Ceded by Britain to Germany (1890); powerfully fortified by Germany. During Great War formed forward base for German fleet; by Treaty of Versailles the fortifications, harbours, and military establishments were destroyed, and defences prohibited for the future. Area, $\frac{1}{2}$ sq. m.; pop. 2,600.

Hellin (*ál-yén*), tn., s.e. Spain, 46 m. s.w. of Murcia; makes leather, pottery, cloth. Pop. 11,000.

Hel'mand, river, Afghanistan, rises in w. Hindu Kush, and flows for about 600 m. s.w., w., and n. to Lake Hamun.

Helmond (*hel'mont*), tn., N. Brabant, Holland, on R. Aa, 26 m. s.s.w. of Nijmegen; textile industries; margarine, soap, tobacco. Pop. 23,000.

Helms'dale, fishing port, Sutherlandshire, Scotland, 29 m. n.e. of Dornoch. Pop. 1,500.

Helm'stett, tn., Brunswick, Germany, 20 m. s.e. of Brunswick; furniture, soap, tobacco, earthenware. Pop. 17,000.

Hels'by, vil., Cheshire, England, 8 m. n.e. of Chester; rubber and cable manufactures. Pop. 2,000.

Hels'ingborg, port, Sweden, on the Sound; exports dairy produce, timber, paper, and iron; manufactures pottery, and has copper works, india-rubber works, breweries, and sugar refineries. Pop. 53,000.

Helsingör, formerly **ELLSINORE**, port, Denmark, on Zealand I.; sawmills, shipbuilding; exports agricultural produce. Pop. 15,000.

Helsinki, formerly **HELSINGFORS**, cap. and port of Finland, on Gulf of Finland; splendid harbour, guarded by fortress of Sveaborg; exports timber, corn, and butter; manufactures sugar, beer, spirits, carpets; univ.; cathedral. Pop. 216,000.

Hel'ston, market tn., Cornwall, England, on R. Cober, 11 m. s.w. of Falmouth; dairy farming centre; summer resort. Pop. 2,500.

Helvel'lyn, mountain in Lake Dist., England, between Thirlmere and Ullswater. Height, 3,118 ft.

Hem'el Hemp'stead, mkt. tn., Herts, England, 5 m. w. of St. Albans; paper making, iron founding; corn and cattle trade. Pop. 15,100.

Hems'worth, urb. dist., W. Riding, Yorks, England, 8 m. s.e. of Wakefield; coal mining and bricks. Pop. 13,000.

Hen'derson, city, w. Kentucky, U.S.A., on R. Ohio; cotton, tobacco; coal mining. Pop. 12,300.

Hen'con, tn., Middlesex, England, on R. Brent; part of Greater London; important aviation centre: aeroplane factories and flying schools. Pop. 115,700.

Hengelo (*hen-he-ló*), tn., Overijssel, Holland; cotton factories, dyeworks, breweries. Pop. 33,000.

Hénin-Liétard (*á-nan-le-á-tar*), tn., Pas-de-Calais, France, 12 m. n.e. of Arras; coal mines, sugar refineries, and tanneries. Pop. 17,800.

Henley-on-Thames, mkt. tn., Oxfordshire, England, on R. Thames; favourite summer resort, noted for its beautiful surroundings; famous annual regatta. Market gardening. Pop. 6,600.

Hennebont (*hen-bon*'), tn., Morbihan, N.W. France, 6 m. N.E. of Lorient; agricultural produce; tin-plating. Pop. 6,300.

Henzada. (1) Dist., Irrawaddy, Lower Burma; rice and tobacco. Area, 2,872 sq. m.; pop. 551,000. (2) Chief tn. of above, 75 m. N.W. of Rangoon; rice mills and sawmills. Pop. 24,000.

Herat, city, w. Afghanistan, situated on Hari Rud, 2,500 ft. above sea-level; once a large city with magnificent buildings, now a mass of ruins. Surrounding country fertile and well irrigated. Pop. c. 10,000.

Hérault (*ä-rö*), maritime dep., s. France; surface rises to Cévennes in N.W.; drained by Rs. Hérault, Orb; salt, wine, fruits, olives, chestnuts; sheep reared, and Roquefort cheese made from their milk. Chief tn., Montpellier. Area, 2,402 sq. m.; pop. 488,200.

Herberton, tn., Queensland, Australia, 70 m. N.W. of Rockingham; tin, copper, bismuth. Pop. 2,800.

Hercegovina. See BOSNIA AND HERCEGOVINA.

Hercules'neum, anc. city, Italy, at E. base of Mt. Vesuvius. In A.D. 79 it was overwhelmed by an eruption. Since early 18th cent., excavations have been going on. The discoveries render possible the reconstruction of the domestic life of the ancients, and many beautiful wall-paintings and statues have been brought to light, as well as philosophical mss., coins, mosaics. It was an important town at time of its destruction.

Heracles, **PILLARS OF**, two rocks which stand on either side of Strait of Gibraltar, that on European side being Rock of Gibraltar, formerly called Calpe; and on African side Ceuta, formerly Abyla.

Her'ford ('ford of the army'), co.

tn., Herefordshire, England, on R. Wye; beautiful cathedral with library of chained books; agricultural produce; cider. Pop. 24,200.

Her'fordshire, inland co., England, on Welsh border, bounded N. by Shropshire, E. by Worcestershire, S. by Gloucestershire and Monmouth, W. by Brecon and Radnor; rich, fertile county, well watered by R. Wye and its tribs.; in E. are Malvern Hills and in S.W. Black Mts. Wheat, barley, and hops; apple and pear orchards; celebrated cattle, sheep, and horses; cider-making main industry; salmon and trout fishing; limestone quarries at Ledbury; some iron foundries. Chief tns., Hereford (cap.), Leominster, Ross, and Ledbury. Area, 842 sq. m.; pop. 111,800.

Her'ford, tn., N.E. Westphalia, Prussia, 8 m. N.E. of Bielefeld; cotton and flax manufactures, carpets, furniture, cigars. Pop. 36,000.

Herisau (*här-is-ow*), tn., N.E. Switzerland, 7 m. N.W. of Appenzell; muslin, embroidery; bleach and dye works. Pop. 15,000.

Hermannstadt. See SIBIU.

Her'mon (modern **JEBEL SHAMIR**), triple snow-clad peak, s. Syria, the highest mountain (9,200 ft.) of Anti-Lebanon range; is encircled with ruins of anc. temples dedicated to Baal.

Hermosillo (*her-mo-sil'yo*), city, cap. of Sonora, Mexico, 80 m. N. of Guaymas; mint, distilleries, and flour mills; sugar, silver. Pop. c. 18,000.

Hermoupolis. See SYROS.

Her'ne, tn., Westphalia, Prussia, 12 m. W. of Dortmund; coal and coke; boiler and ammonia works. Pop. 68,000.

Herne Bay, wat.-pl., N. coast of Kent, England. Pop. 11,200.

Herne Hill, residential suburb of London, Surrey, England, 4 m. S. of St. Paul's.

Hernöand (*her'noo-sant*), tn. and port, Sweden, on Gulf of Bothnia; timber products are exported; engine factories and sawmills. Pop. 12,000.

Her'stal, tn., Belgium, 2 m. N. of

Liège; manufactures iron and steel goods. Pop. 23,000.

Hertford (*hārford*), co. tn., Herts, England, 24 m. n. of London; 2 m. s. is Haileybury Coll.; brewing, malting; brushes, gloves. Pop. 11,400.

Hertfordshire, or **HERTS**, inland co., England, bounded n. by Cambridge, e. by Essex, s. by Middlesex, s.w. by Buckingham, n.w. by Bedford. Beautiful undulating country of hills, valleys, parks, and woods; in n. is branch of Chiltern Hills. Principal rivs. are Lea, Stort, Colne, and artificial New River. Wheat is principal grain grown; water-cress, fruits, and roses cultivated; cattle raised; manufacturing industries small; brewing at Watford; straw hats, paper making, tanning, and brick making. Chief tns., Hertford (cap.), St. Albans, Hemel Hempstead, Watford, Hitchin, and Letchworth. Area, 632 sq. m.; pop. 401,200.

Hertogenbosch. See **'s HERTOGEN-BOSCH**.

Herzegovina. See **BOSNIA AND HERCEGOVINA**.

Hesse, republic of Germany, comprising the provinces Oberhessen, Starkenburg Rheinhessen, and eleven small enclaves; watered by Rs. Rhine, Lahn, Main, Fulda; cereals, root crops, fruit, tobacco, and vines; famous mineral springs; iron, salt, manganese ore; industries: leather goods, chemicals, furniture, hardware and machinery, tobacco, wine. Chief tns., Darmstadt (cap.), Mainz, Würms, Offenbach. Area, 2,970 sq. m.; pop. 1,347,000.

Hesse-Nassau (*hes'e-nas'ow*), prov., Prussia, Germany; surface mostly hilly; magnificent forests; wine, fruits; iron, coal, copper, manganese are mined; mineral springs; much manufacturing. Chief tns., Cassel (cap.) and Frankfurt on Main. Area, 6,063 sq. m.; pop. 2,397,000.

Heale (*hes'el*), urb. dist., E. Riding, Yorks, England, w. suburb of Hull. Pop. 6,400.

Hes'ton and Isleworth (*i'zel-worth*), urb. dist. and outlying suburb of (3,601)

London, Middlesex, England, 12 m. w. by s. of St. Paul's; residential quarter; market gardening. Pop. 75,400.

Heswall, par. and vil., Cheshire, England, on estuary of R. Dee, 3½ m. n.w. of Neston; fisheries. Pop. (par.) 5,000.

Het-ton-le-Hole, par. and mkt. tn., Durham, England, 5 m. n.e. of Durham; coal mines. Pop. 17,700.

Hexham, tn., Northumberland, England, on R. Tyne, 20 m. w. of Newcastle; leather gloves; market gardening centre. Pop. 8,900.

Heysham, port and wat.-pl., Lancs, England, on Morecambe Bay; part of Morecambe; L.M.S. Rly. packet station for Ireland and Isle of Man. Pop. 5,000.

Heyst (*hist*), or **HEYST-SUR-MER**, wat.-pl., W. Flanders, Belgium, 8 m. n. of Bruges; favourite seaside resort.

Heywood, munic. bor. and par., Lancs, England, 8 m. n.n.e. of Manchester; coal mining, cotton and chemical manufacture, boiler works, railway wagons. Pop. 26,000.

Hidalgo (*i-dal'go*), state, Mexico; hilly in n. and e.; s. and w., undulating plain; stock raising, mining, and agriculture; produces silver, gold, copper, mercury; also cereals, coffee, beans, sugar, tobacco. Cap. Pachuca, 55 m. n.n.e. of Mexico city. Area, 8,637 sq. m.; pop. 622,000.

Hierro. See **FERRO**.

Higham Ferrers, munic. bor., Northants, England, 5 m. e. of Wellingborough; boots and shoes. Pop. 2,900.

Highbridge, urb. dist., Somerset, England, on R. Brue, 6½ m. by rail n. of Bridgwater; port; rly. jn.; makes bricks, roofing tiles, and drain pipes. Pop. 2,600.

Highgate, residential suburb of London, England, 4 m. n.w. of St. Paul's.

Highland Park, city, Michigan, U.S.A., near Detroit; motor-car factories; partly residential. Pop. 53,000.

High Point, city, N. Carolina, U.S.A., 80 m. w. of Raleigh; textiles,

furniture, and wooden articles. Pop. 37,000.

High'worth, tn., Wilts, England, 6 m. N.E. of Swindon; formerly a mkt. tn. Pop. 2,150.

High Wycombe. See WYCOMBE.

Hii'maa, formerly DAGÖ, isl., Baltic Sea, belonging to Estonia; N. of Saare Maa; cattle rearing, fishing. Area, 367 sq. m. Pop. 15,000.

Hil'den, tn., Rhineland, Prussia, 8 m. S.E. of Düsseldorf; silk, cotton, printing; tanneries, brickworks. Pop. 20,000.

Hil'denborough, par. and vill., Kent, England, 2 m. N.W. of Tonbridge; makes cricket bats and balls. Pop. (par.) 1,750.

Hildesheim (*hil'des-him*), tn., Hanover, Prussia, at base of Harz Mts., with fine cathedral; chief industries: machinery, vehicles, agricultural implements, church bells, bricks, sugar refining, cigars, brewing, and tanning. Pop. 59,000.

Hil'la, tn., vilayet of Baghdad, Iraq, on R. Euphrates; trade in rice, barley, and wheat. Pop. c. 30,000.

Hill Tippera. See TRIPURA.

Hil'versom, tn., Holland, 16 m. S.E. of Amsterdam; floorcloth, carpets; summer resort. Pop. 52,000.

Himalayas (*him-äl'yas* or *him-a-lä'yas*), highest system of mountains in world, stretching, in irregular curve, almost 1,600 m. along N. boundary of India, with average breadth of 200 m.; they lie mainly between Rs. Indus and Brahmaputra. Rising steeply from Ganges plain is a range (some 4,000 to 5,000 ft.) between which and the higher ranges lie the fertile valleys of Nepal and Bhutan. The greater system, starting from the Pamir Plateau in extreme N.W., is divided into two main parallel chains, one lying N. of the other. The N. chain, forming a watershed between India and Tibet, has been little explored; its only part under 16,000 ft. is Dras Pass (c. 11,300 ft.), which leads to Kashmir; the Niti Pass (c. 16,700 ft.) connects India with Sinkiang. The S. chain, consisting of lofty snowclad peaks, in-

cludes the highest mountains in the world—many over 20,000 ft.; the highest is Mt. Everest (29,140 ft.); other peaks are K² or Mt. Godwin-Austen (c. 28,260 ft.); Kanchenjunga (c. 28,150 ft.). From this chain flow the Ganges, Indus, Brahmaputra, and many of their tributes; on its slopes stand many hill-stations, including Simla, Darjeeling, Murree, Almora. There are numerous glaciers, and the snow-line is higher on the Indian side than on the Tibetan; metal ores exist and gold is worked in Tibet.

Hinck'ley, tn., Leicestershire, England, 13 m. S.W. of Leicester; hosiery, boots, pottery. Pop. 16,000.

Hindenburg (*hin-den-boorg*), formerly ZABRZE, tn., S.E. Silesia, Prussia, 7 m. S.W. of Beuthen; manufactures chemicals, beer, glass, wire; coal mining. Pop. 73,000.

Hind'erwell, urb. dist., N. Riding, Yorks, England, on coast N. of Whitby; iron mines and fisheries. Pop. 2,100.

Hindley (*hind'ley*), urb. dist., Lancs, England, 2 m. S.E. of Wigan; cannon coal, cotton mills, iron works. Pop. 21,600.

Hindu Kush (*hin'doo hoosh*), range of mts. in Central Asia, stretching S.W. from Pamirs to N. of Kabul, over 350 m. long, with breadth of 200 m.; divides Kabul and Oxus basins. Contains sources of many important rivers; crossed by many passes. Tirach Mir (25,400 ft.), on frontier of Chitral, is highest peak.

Hinojosa del Duque (*ë-no-ho'sa-del-doo'hä*), tn., Cordoba, Spain, 48 m. N.N.W. of Cordoba; copper mining; linen and woollens. Pop. 11,000.

Hip'perholme (*-höm*), urb. dist., W. Riding, Yorks, England, 2 m. N.E. of Halifax; tanning and stone quarrying. Pop. 5,400.

Hirosaki (*hi-ro-sä'ke*), tn., N. Honshu, Japan; green lacquerware. Pop. 37,500.

Hiroshima (*hi-ro-she'ma*), tn., S.W. Honshu, Japan; lacquer and bronze manufactures; opposite tn. is sacred 'Island of Light,' with celebrated

Shinto temple, one of three wonders of Japan. Pop. 196,000.

Hirschberg (*hêrsh'berg*), tn., Silesia, Prussia, 26 m. s.w. of Liegnitz; laces, linens, cotton, paper, porcelain, wine, and cider. Pop. 29,000.

Hirson (*êr'son*), tn., Aisne, France, on R. Oise; has foundries, nail and glass works. Pop. 11,000.

Hissar. (1) Dist., Brit. India, one of administrative divs. of Punjab; borders on Rajputana desert; inadequately watered and is subject to famines; produces in E. cattle, rice, barley, wheat, and sesame; saltpetre. Area, 5,217 sq. m.; pop. 817,000. (2) Cap. of above, 100 m. n.w. of Delhi; large cattle fairs. Pop. 22,000. (3) Mountainous prov., Tadzhik, U.S.S.R.; traversed by tribs. of Oxus; fertile valleys produce cereals, cotton, flax; alluvial gold. Cap. Hissar, 80 m. s.s.w. of Samarqand, famous for damascened swords. Pop. 10,000.

Hitch'in, urb. dist. and mkt. tn., n.w. Herts, England; lavender and peppermint; chalk working. Pop. 14,400.

Hjörning (*hyoor'ing*), tn., Denmark, 30 m. s.w. of the Skaw; textiles, engineering, bricks, tobacco. Pop. 11,000.

Hoang-ho. See **HWANG-HO**.

Ho'bart, cap. of Tasmania, on estuary of R. Derwent; centre of large fruit-growing dist.; excellent harbour; has Parliament House, Government House, and univ.; exports are fruit, hops, grain, timber, wool, and minerals; breweries, jam factories, flour and sawmills, potteries, iron foundries, and tanneries. Pop. (with suburbs) 59,000.

Ho'boken. (1) Tn., New Jersey, U.S.A., on R. Hudson; exp. coal; iron foundries; silk and lead pencil manufactures. Pop. 57,000. (2) Tn., Belgium, on R. Schelde; suburb of Antwerp; shipbuilding yards. Pop. 32,000.

Höchst (*hoochst*), tn., Hesse-Nassau, Prussia, on R. Main, 6 m. w. of Frankfurt; machinery, dyes, chemicals; tanning and brewing. Pop. 31,000.

Hoddesdon (*hods'don*), tn., Herts, England, 4 m. s.e. of Hertford; an angling resort; brewing. Pop. 6,800.

Hodaida (*ho-dä'dä*), fort. tn. and port, Yemen, Arabia, on Red Sea; exports coffee, grain, dates, cotton. Pop. 35,000.

Hód-Mész-Vasarhely (*hód-meyoo-vä'shar-hä-ly*), tn., Hungary, 16 m. n.e. of Szeged; dist. very fertile; wheat, grapes, melons, tobacco; cattle, horses, pigs, and sheep are reared. Pop. 62,000.

Hodonin (*hó'don-yén*), formerly Göpping, tn., Moravia, Czechoslovakia, 45 m. n. of Bratislava; manufactures tobacco, sugar, and glass; lignite mines. Pop. 12,000.

Hof (*hóf*), tn., n.e. Bavaria, Germany, on R. Saale, on n.e. slopes of Fichtelgebirge; manufactures textiles, sugar, dyes, chemicals, beer, machinery, hardware. Pop. 41,000.

Hobokenlimburg (*hó'en-lim'boorg*), tn., Westphalia, Prussia, 12 m. s.e. of Dortmund; iron and steel goods, dyes, textiles. Pop. 16,000.

Hobensalza. See **INOWROCLAW**.

Hobenstein - Ernstthal (*hó'en-stén-erns'täl*), tn., Saxony, Germany, 10 m. w. by s. of Chemnitz; textiles, machinery, needles; arsenic mines in vicinity. Pop. 17,000.

Hohenzollern Canal (*hó'en-tsol'ern*), runs 60 m. due n. from Berlin to R. Oder at Stettin; affords access for large vessels from the Baltic.

Hokitika (*hó-ke-tē'ka*), tn., w. coast, South Island, New Zealand; brewing, tanning; sawmills; great gold rush in 1865. Pop. 2,500.

Hokkai'dō ('North Sea road'), n. part of Japanese Empire, including Hokkaido or Yezo I., the Kuriles, and adjacent islets; interior forested; timber cutting, fishing, paper making. Area, 34,084 sq. m.; pop. c. 2,000,000.

Hol'besch, mkt. tn., Lincs, England, formerly on Wash, now 6 m. inland; agricultural industries; brewing; mustard growing. Pop. 6,100.

Holborn (*hó'born*), central metropolitan bor., London, England; contains City Temple, Lincoln's Inn,

Gray's Inn, Brit. Museum, and many other public buildings. Pop. 38,800.

Holderness, flat and fertile peninsula, Yorks, England; a div. of the E. Riding. Pop. 56,000.

Holland, (1) OF THE NETHERLANDS, mar. kingdom, n.w. Europe, consisting mainly of deltaic deposits of R. Rhine, Maas, and Schelde; much of surface below sea-level, and protected by embankments and sand dunes; highest point 655 ft. Bounded by Germany on E., Belgium on S., and elsewhere by North Sea. Within historic times sea invaded land, transforming Flevo lake into the Zuider Zee (South Sea); anc. continental coast-line lay along Frisian Islands, now separated by the Wadden (Shallows) from the mainland. Since 16th cent. over a million acres have been reclaimed from sea, lake, and river; work of reclaiming Zuider Zee was begun in 1924. Four separate areas to be drained cover total area of 523,000 acres, with fresh-water lake in centre. Estuary of R. Maas and Schelde contains many islands—e.g. N. and S. Beveland, Walcheren. Canals and waterways (2,000 m.) much more important than railways (2,300 m.) and metalled roads. Climate resembles that of England, but is more variable. Principal occupations are grazing and agriculture. Cattle of superior breeds give rise to trade in butter and cheese prepared in factories (esp. at Gouda and Edam); chief crops are rye, oats, potatoes, and sugar beets; horticulture, especially production of bulbs, flowers, and fruit, has been carried on for centuries; fisheries of some importance; chief industries are brewing, distilling, manufacture of tobacco, sugar, vinegar, bricks, and stoneware, margarine, machinery, cocoa, salt, diamond cutting, ship-building; coal mining in Limburg prov. is increasing; exports are food products and commodities mentioned above. Official cap., The Hague; Amsterdam is commercial cap., and Rotterdam and Flushing are chief ports. Area, 12,603 sq. m.; pop.

7,731,000. **Colonial Possessions**: Dutch East Indies. Area, 733,715 sq. m.; pop. 52,825,000. Dutch W. Indies comprise Dutch Guiana and Curaçao. (2) City, Michigan, U.S.A.; furnaces, furniture, pianos, shoes, drugs. Pop. 12,000. (3) NORTH and SOUTH. See NORTH HOLLAND and SOUTH HOLLAND. (4) PARTS OF. See LINCOLNSHIRE.

Hollingworth, urb. dist., N.E. Cheshire, England, 3 m. S.E. of Stalybridge; cotton manufacture. Pop. 2,300.

Hollywood. See LOS ANGELES.

Holme Cultram, urb. dist., Cumberland, England; contains wat.-pl. of Silloth, 18 m. W. of Carlisle. Pop. 4,700.

Holm'firth, tn., W. Riding, Yorks, England, 6 m. S. of Huddersfield; woollen mills. Pop. 10,400.

Holo', formerly SULU, archipelago, extending from S.E. Borneo to S. Philippines; larger islands volcanic, others of coral formation; teak, rice, coffee, cotton, saffron, sesame, indigo are grown, and pearl shell exported; group belongs to U.S.A. Cap. Holo, on Holo I. Area, c. 1,000 sq. m.; pop. c. 100,000.

Holstein. See SCHLESWIG-HOLSTEIN.

Holt, par. and mkt. tn., Norfolk, England, 10 m. W. by S. of Cromer. Pop. (par.) 2,250.

Holyhead, port, Holy Isle, Anglesey, N. Wales; chief mail-packet station for Ireland. Pop. 10,700.

Holy Island, OF LINDISFARNE, isl. off Northumberland, England; connected with mainland at low tide by sandy tract; has ruined Benedictine monastery and a castle; small fishing village and summer resort in S.W. Area, 1,338 ac.; pop. 600.

Holy Land. See PALESTINE.

Holyoke (hō'yōk), tn., Massachusetts, U.S.A., on Connecticut R., dammed here to supply water power; paper industry, textiles, machinery. Pop. 57,000.

Holytown, tn., Lanarkshire, Scotland, 11 m. E.S.E. of Glasgow; coal mines, steel works. Pop. 12,500.

Holywell, mkt. tn., Flint, Wales; zinc mines, cement works, hardware. Pop. 3,400.

Holywood, port, co. Down, N. Ireland, on Belfast Lough; bathing resort; residential area of Belfast. Pop. 4,000.

Holzmin-den (*holts'min-den*), tn., Brunswick, Germany, on R. Weser; ironworks, sawmills, chemicals, and manures. Pop. 12,000.

Homburg, or **HOMBURG-VOR-DE-HÖHE** (*hom'boorg-för-där-hö'ä*), tn. and wat.-pl., Hesse-Nassau, Prussia, 10 m. N.W. of Frankfurt; saline and chalybeate springs; machinery, dye, and leather works, hats. Pop. 14,300.

Hornel. See **GOMEL**.

Horn'sstead, tn., Pennsylvania, U.S.A., 6 m. S.E. of Pittsburgh; iron and steel works, engines, machinery, aeroplane propellers. Pop. 20,000.

Homs, tn., Syria, near R. Orontes; important point on trade route; manufactures silk, textiles, gold and silver thread. Pop. 53,000.

Honan', prov., Central China; greater part level; drained by Hwang-Ho; wheat, maize, beans, hemp, cotton; coal is worked. Chief tns., Kai-feng (cap.) and Honan. Area, 69,830 sq. m.; pop. c. 30,000,000.

Honduras ('wave-like'). (1) Rep., Central America, bounded N. and E. by Caribbean Sea; S., Nicaragua, Pacific and Salvador; and W., Guatemala; coast-line c. 400 m. Surface, excepting narrow strip of swamp-land on the coast, is mountainous, traversed by Nicaraguan Cordillera, and forming elevated tableland with fertile plains and valleys, and rising in mountain ridges—highest point being Montaña de Salaque (c. 10,120 ft.); many streams, including Segovia (c. 350 m.) and Ulua. Climate is healthy in highlands, but oppressive in lowlands. Bananas are the most important product; coconuts, coffee, tobacco, and sugar are also produced; country rich in minerals: gold, copper, antimony, silver, iron; industries are cattle breeding and straw plaiting for hats. Cap. Tegucigalpa; tns. include

La Esperanza, Santa Rosa, Amapala, and Tela (banana port). Area, 44,275 sq. m.; pop. 761,000. (2) **BRITISH**, crown colony, Central America; W. side of Gulf of Honduras, bounded N. by Yucatan, W. by Guatemala. Coast swampy, succeeded by rich plain and hills and mountains. Climate moist and hot. It produces cedar, mahogany, rosewood, logwood, chicle sugar, coffee, sarsaparilla, fruits, tortoiseshell, most of which are exported; imports cotton, yarn, cloth, hardware, general goods. Cap. Belize. Area, 8,598 sq. m.; pop. 45,300.

Hondleur (*on-fleur*), port and wat.-pl., Calvados, France, on estuary of R. Seine; shipbuilding, fishing, chemical manures. Pop. 8,300.

Hong Kong, island belonging to Britain, lying off S.E. coast of China at estuary of Canton R., along with small portion of mainland on peninsula of Kowloon, constitutes crown colony of Hong Kong; extreme length of isl. c. 11 m., and breadth 2 to 5 m.; separated from mainland by strait, which makes an excellent harbour. Interior barren and rocky. Chief exports, rice, sugar, tea, silk, and tin; univ. opened, 1912. Cap. Victoria. Area, 32 sq. m.; pop. 1,076,000.

Hon'ton, tn., Devon, England, on R. Otter, 16 m. E.N.E. of Exeter; noted for lace; brewing; sawmilling; butter. Pop. 3,000.

Hon'ley, urb. dist., W. Riding, Yorks, England, $3\frac{1}{2}$ m. S. of Huddersfield; woollen mills. Pop. 4,600.

Honolu'u, cap. and principal port of Hawaiian Islands, on S. coast of Oahu; pleasant, well-planned, and highly civilized town; pineapple canning; exp. coffee, sugar, and wool; coaling station. Pop. 116,000.

Honsbu. See **JAPAN**.

Hooghly (*hoog'li*). (1) Most westerly mouth of R. Ganges, entering Indian Ocean. Trade to Calcutta passes up this branch. Has rapid tidal bore; navigation difficult. (2) Tn., Bengal, India, in dist. and on riv. of same name; has fine mosque. Pop. 30,000.

Dist. produces rice and jute. Area, 1,188 sq. m.; pop. 1,080,000.

Hoorn (*hörn*), port, Holland, on Zuider Zee; famous cheese and cattle markets; boat building, sawmills; quaint old buildings. Pop. 12,000.

Hopeh, most N. province, China; divided in two by Great Wall; N. mountainous; has great extremes of climate; S. low, fertile, well-watered; produces wheat and millet; coal is found. Chief towns, Peking and Tientsin. Area, 115,830 sq. m.; pop. 32,000,000.

Hopkinsville, tn., W. Kentucky, U.S.A., 80 m. S. of Evansville, Indiana; great tobacco and live-stock markets; manufactures cigar boxes and furniture. Pop. 14,000.

Hoquiam (*hö'kwe-am*), tn., Washington, U.S.A., at mouth of R. Hoquiam, on Gray's Harbor; great sawmills and wood-working factories; canneries for fruit and salmon. Pop. 11,000.

Horbury, tn., W. Riding, Yorks, England, 3 m. S.W. of Wakefield; woollen goods, railway wagons. Pop. 7,800.

Hörde, tn., Westphalia, Germany, 3 m. S.E. of Dortmund; iron and steel works, coal and iron mines. Pop. 33,000.

Hormuz, small isl., Strait of Hormuz, Persia, 11 m. S.E. of Bandar Abbas; chief products, red ochre and rock salt; great trading centre 14th to 16th cent.; trade transferred to Bandar Abbas.

Horn, CAPE, most S. point of S. America, on isl. of Tierra del Fuego; prevalent W. winds make navigation very difficult. Alt. 1,390 ft.

Horn'castle, mkt. tn., Lincolnshire, England, 18 m. E. by S. of Lincoln; great horse fair, and trade in agricultural produce. Pop. 3,500.

Hornchurch, urb. dist., Essex, England, 2 m. S.E. of Romford; manufactures bricks, tiles, etc. Pop. 28,400.

Hornell, city, New York, U.S.A., on Canisteo R., 70 m. S.E. of Buffalo; railway stock, furniture, silks, and electrical goods. Pop. 16,000.

Horn'sea, urb. dist., E. Riding,

Yorks, England, on North Sea, 15½ m. by rail N.E. of Hull; wat.-pl.; fishing; Anglo-Saxon antiquities. Hornsea Mere (327.5 acres) is largest lake in co. Pop. 4,500.

Hornsey, munic. bor., part of Greater London, 5 m. N. of St. Paul's; mainly working-class dist. Pop. 95,500.

Horsens, port, Jutland, Denmark, 22 m. S.W. of Aarhus; weaving, tobacco, soap, electrical goods, condensed milk, organs; dairy products exported. Pop. 28,000.

Horsforth, urb. dist., W. Riding, Yorks, England, 5 m. N.W. of Leeds; woollen manufacture. Pop. 11,800.

Hors'ham, mkt. tn., N. Sussex, England; iron and brass founding; bricks, pottery; brewing. Christ's Hospital (the Bluecoat School) housed near by. Pop. 13,600.

Horten, port, Norway, on Oslo Fjord; shipbuilding; wat.-pl. Pop. 10,000.

Horwich (*hor'ich*), urb. dist., Lancs, England, 18 m. N.W. of Manchester; locomotive works, bleaching, cotton spinning, dyeing, calico printing; stone quarries, brick and tile works. Pop. 15,700.

Hoshangabad. (1) Dist., Central Provinces, India, between R. Nerbada and Satpura Mts.; wheat, linseed, cotton. Area, 3,681 sq. m.; pop. 445,000. (2) Chief tn. of above, on R. Nerbada; brass-working, cotton industries. Pop. 12,000.

Hoshiarpur (*hosh-yar-poor*). (1) Dist., Punjab, India; rice, cotton, tobacco. Area, 2,247 sq. m.; pop. 927,000. (2) Cap. of above, 60 m. E. of Amritsar; lacquer, cottons, and ivory-inlaid articles. Pop. 21,000.

Hotin, tn., N. Romania, on R. Dniester; manufactures leather, candles, beer, bricks. Pop. 19,000.

Hot Springs, health resort, Arkansas, U.S.A., 55 m. S.W. of Little Rock; thermal-mineral-springs. Pop. 20,000.

Houghton-le-Spring (*hö'ton*), tn., co. Durham, England, 6 m. N.E. of Durham; collieries and limestone quarries. Pop. 20,500.

Hounslow, tn., Middlesex, England, 10 m. w.s.w. of London; part of Greater London; powder mills; Kneller Hall is headquarters of Royal Military School of Music. Hounslow Heath was a highwayman's haunt. Pop. 23,000.

Houston (*hoo's-ton*), tn., Texas, U.S.A.; railway centre and port, connected by canal with Galveston Bay; large exp. of cotton; great oil refineries; rice mills; machinery; railway carriages. Pop. 290,000.

Hove, tn. Sussex, England; continuous with Brighton; popular resort. Pop. 55,000.

Howrah, tn., Bengal, India, opposite Calcutta; jute, cotton, shipbuilding. Pop. 195,000.

Howth (*hóth*), tn., co. Dublin, I.F.S., on Dublin Bay; summer resort; fishing. Pop. 3,100.

Hoy, mountainous isl., Orkney, Scotland; cliffs 1,140 ft. high; the 'Old Man of Hoy,' an isolated rock, rises to 450 ft. Has celebrated 'Dwarfie Stone,' in which are excavated rooms. Area, 53 sq. m.; pop. 1,000.

Hoylake, tn., Cheshire, England, 6 m. w. of Birkenhead; famous golf links; fishing. Pop. (with W. Kirby) 16,600.

Hoyland, NETHER, tn., W. Riding, Yorks, England, 3 m. s.e. of Barnsley; coal mines, ironworks, brickworks. Pop. 15,200.

Hradec Králové (*hrad'ets krá-lo-vé*), formerly KÖNIGGRÁTZ, tn., Bohemia, Czechoslovakia, on R. Elbe; engineering, tanning, soap, candles, pianos. Scene of decisive victory of Prussia over Austria (1866), known as battle of Sadova or Königgrätz. Pop. 13,000.

Hai-an. See SIAM.

Huancavelica (*wan-ha-ai-lé'ha*), dep. central Peru; mountainous; silver, copper, lead, tungsten, mercury not developed owing to lack of communications; wheat, potatoes; alpacas reared. Cap. Huancavelica, 150 m. e.s.e. of Lima. Area, 8,297 sq. m.; pop. 230,000.

Huancoco (*wan-oo'ko*), dep., central Peru; mountainous; cotton, sugarcane, coffee, grown in valleys; much mineral wealth unworked. Cap. Huancoco, 150 m. n.n.e. of Lima. Area, 15,425 sq. m.; pop. 200,000.

Huaraz (*wá-ráth*), tn., cap. of Ancachs, Peru, 180 m. n.n.w. of Lima; mineral springs; silver, copper, and lead mines in vicinity. Pop. 20,000.

Hubli (*hoo'ble*), tn., s. Bombay, India, 15 m. s.e. of Dharwar; cotton and copper manufactures. Pop. 69,000.

Huehow, tn., Chekiang, China, 80 m. s.w. of Shanghai; silk centre. Pop. 100,000.

Hucknall, urb. dist., Notts, England, 8 m. n.w. of Nottingham; hosiery; coal mines. Pop. 17,300.

Huddersfield, co. bor., W. Riding, Yorks, England, on R. Colne, in extensive coalfield; centre of 'fancy' woollen industry; silk and cotton goods; iron goods, machinery, locomotives. Pop. 113,500.

Hudson, tn., New York, U.S.A., on Hudson R.; Portlandcement, hosiery, and knitted goods. Pop. 11,400.

Hudson Bay, great inland sea, n. of N. America; receives drainage of great part of Canada by Churchill, Nelson, Albany, and other rivers. Connected with Atlantic by Hudson Strait. Well stocked with salmon and cod. Hudson Strait is open to navigation for two or three months in each year. Area, 400,000 sq. m.

Hudson River, riv., New York state, U.S.A.; rises in Adirondack Mts.; falls into Atlantic at New York; total length, c. 315 m. Principal trib. is R. Mohawk. The Hudson-Mohawk route across Appalachian Mts. with barge canal and rly. to L. Erie affords important means of communication between New York and Great Lakes.

Hué (*whá*), fort, tn., Fr. Indo-China, on Hué R., 9 m. from sea; cap. of Annam; produces glass and ivory goods. Pop. 41,000.

Huelva (*wé'ua*). (1) Frontier prov., s.w. Spain; valuable copper mines; wine, fruit, esparto. Area, 3,913 sq. m.; pop. 379,000. (2) Cap. of above,

55 m. w. by s. of Seville; fishing; exp. copper and manganese. Pop. 44,000.

Huercal Overa (*uer-kal' o-ud'ra*), tn., s.e. Spain, 40 m. n.e. of Almería; silver, copper, and lead mines. Pop. 16,000.

Huesca (*wes'ka*). (1) Prov., Spain; watered by Aragon and other affluents of R. Ebro; n. occupied by Pyrenees; mts. well forested; produces wine, grain, fruit. Area, 5,848 sq. m.; pop. 253,000. (2) Cap. of above; cathedral; leather, pottery; trade in wine, fruit, cereals. Pop. 14,000.

Hull. (1) Properly KINGSTON-ON-HULL, riv. port and co. bor., E. Riding, Yorks, England, at confluence of R. Hull with Humber; extensive docks; shipbuilding, machinery, chains, ropes, canvas, chemicals, vegetable oil, tanning, sugar refining, brewing; extensive trade with Continent; deep-sea fishing. Univ. college. Pop. 313,400. (2) Town, Quebec, Canada, opposite Ottawa; lumber, pulp, and paper mills; matches. Pop. 27,000.

Humber, estuary of Rs. Trent and Yorkshire Ouse, e. coast of England, between Yorkshire and Lincolnshire.

Hunan ('south of the lake'), prov., central China, in Yangtze Kiang basin; surface hilly; coal, zinc, antimony; tea, rice, wheat. Cap. Chang-sha. Area, 83,380 sq. m.; pop. 28,000,000.

Hungary, inland kingdom, central Europe, bounded n. by Czechoslovakia, e. by Romania, s. by Yugoslavia, w. by Austria. Surface is mainly plains of middle Danube and its trib. the Tisa (Theiss); the smaller plain, the 'Little Hungarian Alföld' (area c. 6,000 sq. m.), and the Great Hungarian Alföld, the largest plain in Europe (c. 37,000 sq. m.), are separated by the Bakony Wald, which lies between the R. Danube and Lake Balaton. The Danube enters Hungary below Bratislava, turns s., and flows through Hungary into Yugoslavia; is navigable for vessels drawing 6 ft.; R. Tisa rises in Carpathians,

flows through Hungary, and crosses s. border below Szeged; navigable for steamers to Tokay; country subject to river floods; many marshes. Largest lake is Balaton (265 sq. m.). Climate is continental; rainfall of early summer is followed by remarkably dry period. Greater part of the Alföld consists of wide, open, treeless steppes called *puszta*s, with herds of horses, cattle, buffaloes, sheep, and swine; soil excellently adapted for the growing of wheat. Agriculture is chief occupation, and wheat, rye, barley, oats, maize, and potatoes of excellent quality are grown; tobacco, sugar beet, apples, apricots, grapes, peaches, pears, plums, and hops are largely produced; land is divided among peasant proprietors, who engage largely in bee-keeping and silk culture; forests yield oak, beech, and pine; chief minerals are coal, lignite, bauxite; salt is a state monopoly. Industries include brewing and distilling, wine making, sugar and flour milling, and tobacco. Agricultural implements, machinery, pig-iron, and steel are manufactured. Univs. at Budapest (cap.), Szeged, Pécs, and Debrecen. Area, 35,875 sq. m.; pop. 7,980,000.

Hungerford, tn., Berks and Wilts, England, 24 m. w. by s. of Reading; trout fishing, hunting. Pop. 2,800.

Hunstanton (or *hun'ston*), or NEW HUNSTANTON, urb. dist., Norfolk, England, on the Wash, 14 m. n. by e. of King's Lynn; seaside resort. Pop. 3,100.

Huntingdon. (1) Co. tn., Hunts, England, on R. Ouse; has 13th-cent. grammar school; birthplace of Oliver Cromwell. Pop. 4,100. (2) Tn., Pennsylvania, U.S.A., 150 m. e. of Pittsburgh; flour, leather; coal, iron, and limestone. Pop. 7,000.

Huntingdonshire (HUNTS), midland co., England, bounded n. and w. by Northants, s.w. by Beds, e. by Cambridge. Surface mostly level, with slight risings in s.e. In n.e. is fen district called Bedford Level. Principal rivs. are Nene and Ouse. Chiefly

agricultural county; much pasture-land; wheat chief grain grown; market gardening and fruit growing, brewing, tanning, ironfounding, and manufactures of paper and parchment. Chief tns., Huntingdon (cap.), St. Ives, and Godmanchester. Area, 366 sq. m.; pop. 56,200.

Huntington. (1) Tn., Indiana, U.S.A., 25 m. s.w. of Fort Wayne; shoes, gloves, and pianos; lime burning. Pop. 14,000. (2) Tn., Long Island, New York, U.S.A.; shipbuilding; market gardening; oyster fishing. Pop. 21,000. (3) Tn., W. Virginia, U.S.A., on R. Ohio; manufactures machinery; furniture, lumber. Pop. 76,000.

Huntly, tn., Aberdeenshire, Scotland, 40 m. n.w. of Aberdeen; agriculture and woollens. Pop. 3,800.

Hupeh (*hoo-pā*), ('north of the lake'), prov., central China; a plain, watered by Yangtze and Han rvs.; tea, cotton, rice, wheat; coal mines. Cap. Wuchang. Area, 71,410 sq. m.; pop. 27,167,000.

Huron (*hū'ron*). (1) One of Great Lakes, N. America, connected with Lakes Superior, Michigan, and Erie by St. Mary R., Mackinac Strait, and St. Clair R. respectively. Area, 23,010 sq. m. (2) Tn., S. Dakota, on James or Dakota R., 105 m. e. of Pierre; meat products, dairy produce. Pop. 10,000.

Hurstmonceux (*hurst-mon-soo'*), vil., Sussex, England, 7 m. n.e. of Eastbourne; ruined castle; willow baskets made. Pop. 1,500.

Hurstpierpoint, mkt. tn., Sussex, England, 8 m. n. of Brighton; anc. Brit. camp and remains of Roman villa. Pop. 3,100.

Husi (*hoo'shi*), tn., Moldavia, Rumania, near R. Prut; wine, tobacco, and live-stock. Pop. 17,000.

Husum (*hoo'zoom*), tn., Schleswig-Holstein, Germany, 100 m. n.w. of Hamburg; cattle markets; oyster fisheries. Pop. 10,000.

Hutchinson, city, Kansas, U.S.A., on Arkansas R.; salt-works; creameries and flour mills. Pop. 27,000.

Huy (*oo'ē*), tn., Liège, Belgium, on R. Meuse; distilleries; paper mills. Pop. 14,500.

Hwang-Hai. See **YELLOW SEA**.

Hwang-Ho ('yellow river'), one of the chief rivers of China; rises near sources of Yangtze Kiang in Tibet, and flowing n.e., traverses n.w. China and part of Mongolia; re-enters China, flowing s., e., and n.e.; enters Gulf of Pohai or Pe-chih-li; drains basin of 600,000 sq. m., and is c. 2,500 m. long. Liable to destructive floods, hence known as 'China's Sorrow.'

Hyde (*hid*), munic. bor., Cheshire, England, 7 m. e. of Manchester; cotton spinning and weaving; engineering; margarine. Pop. 32,100.

Hyderabad. (1) Principal Indian state in India, lying in Deccan between provs. of Madras and Bombay. Country fertile, but poorly cultivated. Chief rvs., Godavari and Kistna. Rice, wheat, maize, cotton are grown. Considerable undeveloped mineral wealth. Area, 82,698 sq. m.; pop. 12,472,000. (2) Cap. of above, on R. Musi; surrounded by walls; important commercial centre; fourth largest town in India. Pop. 404,000. (3) City, cap. of dist. of same name, Sind, Bombay, Brit. India; near e. bk. of R. Indus; arsenal; manufactures silks, gold and silver work, pottery. Pop. 82,000.

Hyères (*ē-ār*), winter health resort, Var, France, on Riviera, 11 m. e. of Toulon and 3 m. from sea; climate mild and dry; picturesque old town; vineyards, palms, orange groves, and rose and flower cultivation; salt pans in dist.; market gardening, early fruit and vegetables. Pop. (including suburb of Costebelle), 21,300.

Hyogo. See under **KOBÉ**.

Hythe (*hith*), wat. pl., Kent, England, one of the Cinque Ports; fine beach and golf course. Pop. 8,400.

I

Ibadan', tn., Yoruba, s. Nigeria, 124 m. by rail N.N.E. of Lagos; has Brit. resident and is station for Hausa troops; market for cotton; silk made and tobacco grown. Pop. c. 175,000.

Ibagué (*i-bá'gá*), or SAN BONIFACIO DE IBAGUÉ, tn., Colombia, S. America, 100 m. w. of Bogota; cocoa, tobacco, and sugar-cane. Pop. 30,000.

Ibarra (*i-bar'a*), tn., Ecuador, S. America, at foot of volcano of Imbabura, 50 m. N.N.E. of Quito; cotton and woollen industries. Pop. c. 10,000.

Iberian Peninsula, name applied to Spain and Portugal taken together; derived from the Iberian people who lived along the river Ebro (Latin *Iberus*); separated from rest of Europe by the Pyrenees; flora and fauna resemble those of N. Africa, hence it is frequently stated that 'Africa begins at the Pyrenees.' Area, 229,054 sq. m.; pop. 28,635,000. See SPAIN; PORTUGAL.

Il'stock, par. and vil., Leicester-shire, England, 5 m. N. of Market Bosworth; coal mines, brick and tile works. Pop. (par.) 5,200.

Ice'land, isl. in North Sea, c. 500 m. N.W. of Shetland Islands and 250 m. S.E. of Greenland; N., E., and W. shores much indented by fiords; surface consists of ice-covered plateaus 1,500 to 2,000 ft., and mts. culminating in Öröfa Jökull (6,425 ft.), near S.E. coast; numerous small lakes, many being crater basins or moraine lakes. Glacier fields cover 5,000 sq. m.; in interior are large areas covered by recent lavas. Over twenty of the many volcanoes have been active in modern times; the best known are Hecla (5,108 ft.), Katla, and Askja; hot springs and geysers are common. Chief industry is breeding of cattle and sheep; principal exports: salt fish (esp. cod), butter, oil, mutton, and wool. Only c. 7,000 sq. m. of area are habitable; there are no railways.

Iceland is independent state, governed by King of Denmark. Cap. Reykjavik. Area, 39,709 sq. m.; pop. 95,000.

Ichang', treaty port, Hupeh, China, on Yangtze Kiang, 10 m. below Ichang gorges; opened in 1877; tranships cargo to and from Szechwan; trades in cotton, cotton goods, rice, and oil. Pop. 110,000.

Iconium (*i-kón'i-um*) (modern *Konia*), anc. city, Asia Minor. Cap. of Lycaonia under Romans; three times visited by Paul and Barnabas. See KONIA.

Ida (*i'da*). (1) Mt. range, Mysia, N.W. Asia Minor, at foot of which lay anc. plain of Troy. Granicus, Simois, Scamander, and other streams of classic story rise in it; now known as Kaz Dag (highest point, 5,750 ft.). (2) Mt., centre of Crete, alt. 8,050 ft.; Zeus said to have been born in one of its caves; modern name Psiloriti.

Idaho (*i'da-hó*), W. State, U.S.A., bounded N. by British Columbia, Montana, E. by Montana and Wyoming, S. by Utah and Nevada, W. by Oregon and Washington. Surface mainly rugged and mountainous; S.E. region lies in Great Basin of U.S.A., while the rest, some 70,000 sq. m., lies in drainage basin of Columbia R.; in N. and E. is part of Rocky Mt. system, the Salmon R. range, separating Idaho from Montana; other ranges are the Saw Tooth and Baisé; the Snake R. Plains are large stretches covered with drifting sand. Abundant vegetation in N. and centre. Climate is healthy. Mineral deposits include gold, copper, lead, silver, zinc, and coal, while in the S.E. soda, gypsum, and sulphur are found; there are many state forests; grain farming is mostly confined to river valleys, but extensive irrigation works have been carried out; most important crop is wheat; other crops are oats,

barley, potatoes, hay; principal industries are lumber and timber working, flour and grist milling; stock raising is carried on. Cap. Boise. Area, 83,888 sq. m.; pop. 432,000.

Idle, par. in co. bor. of Bradford, W. Riding, Yorkshire, England; woollen trade; stone quarrying and brick-making. Pop. 7,900.

Iglau. See JIHLAVA.

Iglesias (*ē-gīl'sē-ās*), tn., Sardinia, Italy, 34 m. w. by N. of Cagliari; lead and zinc mines worked since Roman times; cathedral (1285); old walls and towers; castle (1325). Pop. 20,000.

Igualada (*ēg-wa-lā'da*), city, prov. Barcelona, Spain, 32 m. N.W. of Barcelona; leather and textiles; centre of rich agricultural and wine-producing dist. Pop. 12,000.

Ilan (*ē-lā-gān'*), cap. Isabela prov., Luzon, Philippines, 175 m. N.N.E. of Manila; centre of tobacco industry. Pop. 23,000.

I'chester, tn., Somerset, England, 5 m. N.W. of Yeovil; anc. Roman station; important town in Saxon times; Roger Bacon born in or near town. Pop. 500.

Ile-de-France, anc. prov., France, bounded by rivers Seine, Oise, Thèze, Beuvronne, and Marne.

Ile du Disble (*ē-doo dē-ābl'*), one of the group of Iles du Salut, off coast of Fr. Guiana, 50 m. N.W. of Cayenne; convict settlement.

Iles du Salut. See SALUT, ILES DU.

Iletsk (*ē-letsk'*), tn., Orenburg, Russia, on riv. Ilek, trib. of Ural R., 40 m. S. of Orenburg; important salt mines; salt and brine baths. Pop. 11,000.

Ilford, or GREAT ILFORD, urban dist. and tn., Essex, England, part of Greater London; residential suburb; paper mills and photographic works. Pop. 131,000.

Ilfracombe (*il'fra-coom*), urban dist., mkt. tn., and seaside resort, Devon, England, on Bristol Channel; fishing and small coasting trade. Pop. 9,200.

Ilhavo (*ē-lā-vō*), seaport, Beira, Portugal, 37 m. S. of Oporto, on

lagoon; exports salt; fisheries; factory of Vista-Alegre famous for glass and porcelain. Pop. 13,000.

Il, riv., central Asia, rises in Tien Shan Mts.; flows N.W. and falls by several mouths into Lake Balkhash. Length, c. 900 m.; navigable between Balkhash and Iliisk.

Ilkeston (*ilks'ton*), munic. bor., Derbyshire, England, 9 m. E.N.E. of Derby; hosiery, lace; earthenware, bricks; ironworks, ironstone mines, and collieries. Pop. 32,800.

Ilkley (*ilklā*), urb. dist., W. Riding, Yorkshire, England, on R. Wharfe; famous mineral springs; Roman and Saxon remains; Bolton Abbey within 5 m. Pop. 9,700.

Illawarra (*il-la-wā'r-ra*), dist., New South Wales, Australia, forming belt of land between the S. tableland and the coast; very fertile; rich coal seams; dairy farming; coal, iron ore, fireclay, and freestone are mined. Lake Illawarra, salt lagoon, 9 m. by 3 m., frequented for scenery and fishing. Chief towns, Wollongong, Bulli, Kiama, and Geringong.

Ille-et-Vilaine (*ē-ā-vē-lān'*), mar. dep., N.W. France, part of anc. Brittany; watered by rivs. Ille and Vilaine; temperate, humid climate; not naturally fertile, but greatly improved by careful tillage; chief crops, wheat, buckwheat, oats, and barley; market gardening; potatoes, early vegetables, flax, and hemp are largely grown, as well as apples and pears, cider being made; large numbers of horses and cattle reared; manufactures unimportant; iron, lead, zinc, slate, granite obtained; fishing on coast. Chief tns., Rennes (cap.), St. Malo, Dinard. Area, 2,697 sq. m.; pop. 562,000.

Illinois (*il-i-noi'* or *il-i-nois'*), N. Central State of U.S.A., bounded N. by Wisconsin, E. by Lake Michigan and Indiana, S.E. and S. by Ohio R., S.W. and W. by Mississippi R. Situated in prairie-plain region, touching Great Lake dist. in N.E.; average height above sea-level 600 ft. Watered by rivs. Mississippi, Ohio, and tribs.;

most important river is Illinois, at times broadening into vast lakes—notably Peoria Lake. Climate extreme. Illinois is richest agricultural state of U.S.A., chief cereal crops being maize, wheat, oats, and hay; active live-stock industry carried on. Minerals are important, chief mineral product being coal, of which Illinois is third largest producer in U.S.A.; many petroleum wells; zinc is worked, also lead, limestone, salt, and fluor-spar. Chief industries are slaughtering and meat packing, iron and steel foundries. Cap. Springfield. Chicago, the largest city, is second largest in America; other cities, Peoria, East St. Louis, Quincy, Rockford, Joliet, and Decatur. Area, 56,665 sq. m.; pop. 6,500,000.

Illogan (*il-ug'an*), par. and vil., Cornwall, England, 2 m. N.W. of Redruth; tin and copper mines. Pop. (par.) 8,300.

Ilyria, name applied to coastal region along Adriatic Sea from Fiume in N. to Albania in S., and stretching inland as far as rivs. Danube and Morava. Mainly part of Yugoslavia.

I'men, large fresh-water lake, N.W. Russia, immediately S. of city of Novgorod. Area, 360 sq. m.; 93 ft. above Baltic level; flat, marshy shores; discharges into Lake Ladoga by R. Volkhov; productive fisheries.

Ilmenau (*il-me-nou*), tn., summer resort, Thuringia, Germany, at N. base of Thüringer Wald, 20 m. S.S.E. of Gotha; porcelain, toys, glass, papier-maché, and steel goods. Pop. 14,000.

Ilminster, urb. district, Somerset, England, 10 m. S.E. of Taunton; manufactures lace, shirts, and collars; agricultural centre. Pop. 2,200.

Iloilo (*il-lo-il'lo*), town, cap. prov. Iloilo, Panay I., Philippines; one of chief ports of archipelago; exports sugar, tobacco, rice. Pop. 49,000.

Ilorin (*il-aw'rin*), chief tn., native amirate, N. Nigeria, 170 m. N.N.E. of Lagos; connected by rail with coast (245 m.); 30 m. E. at Aguiji, is government experimental and forestry

station; agricultural centre; extensive caravan trade. Pop. 73,000.

Illey, EAST, mkt. tn., Berkshire, England, 11 m. S. of Abingdon; sheep markets and fairs; race-horses trained. Pop. 400. West Illey is 2 m. to the N.W.

Imatra Falls. See FINLAND.

Im'bros, Turkish isl., N.E. Aegean Sea, 14 m. W. of entrance to Dardanelles; of volcanic origin; cereals, fruit, and olives grown. Kastron (N. coast), chief tn. Area, 100 sq. m.; pop. c. 9,000.

Im'mingham, port, Lincolnshire, England, 4 m. from Grimsby; largest dock on E. coast. Pop. 2,200.

Imola (*im'ō-la*), tn., Italy, 21 m. by rail S.E. of Bologna; manufactures glass and pottery; 12th cent. cathedral. Pop. 37,000.

Imphal. See MANIPUR (2).

Ince-in-Makerfield, urban dist., Lancashire, England, 1 m. S.E. of Wigan; collieries, ironworks, railway workshops, and cotton mills. Pop. 21,800.

Inchcape. See BELL ROCK.

Inchcolm (*insh-kōm*), ('island of Columba'), small isl. in Firth of Forth, Scotland, now national property; ruins of monastery founded by Alexander I. (1123).

Inchgarvie, rocky islet, Firth of Forth, Scotland, between N. and S. Queensferry; forms central support of the two great spans of Forth Bridge.

Inchkeith, isl., Firth of Forth, 2½ m. S. of Kinghorn, Fife, Scotland; lighthouse on the highest point; can be seen 21 m.; strongly fortified; now government property.

Independence, city, Missouri, U.S.A., 10 m. E. of Kansas City; iron foundries, flour mills; agricultural produce. Pop. 12,000.

India, the central peninsula of S. Asia, includes terr. over which Brit. king as Emperor of India exercises dominion or suzerainty. Four distinct regions are recognized: (1) the mountainous north, (2) the Indo-Gangetic valley, (3) the Deccan, (4) Burma.

(1) The Himalayas protect India on

n.w. frontier, and act as barrier between Assam and Burma. On n.w. frontier the mountains are pierced by passes, most important of which are that through which Kabul R. passes, Khyber pass, and Bolan pass. See HIMALAYAS.

(2) Alluvial plains, richest and most densely populated part of India, stretching from Arabian Sea to Bay of Bengal, owe their fertility to Rs. Indus, Jumna, Ganges, and Brahmaputra.

(3) The Deccan plateau (average height 1,500-2,000 ft.) enclosed on e. and w. by E. and W. Ghats respectively. Drainage of this area is mainly to e., chief rvs. being Mahanadi, Godavari, Kistna, and Cauvery. N. of Surat, Rs. Narbada and Tapti drain to w. from slopes of Vindhya hills, which form roughly-defined s. boundary of the tableland.

(4) Burma, n. part of Indo-Chinese peninsula. See BURMA.

Climate, which is typically monsoon, varies from cold of Himalayas to intense, moist heat of plains and dry heat of Deccan. The s.w. (summer) and n.e. (winter) monsoons are much modified by local configuration. The three seasons are: hot (March to May), wet (June to Oct., later in s. Madras), and cool. Rainfall varies from 8 in. in Sind and Cutch to over 500 in. at Cherrapunji in Assam. Any failure of the regular rains is disastrous and leads to serious famine. Agriculture is chief industry, nearly three-fourths of total pop. being engaged in it. Much use is made of irrigation, and large tracts of land have been made productive by this means. The government irrigation works water c. 28,000,000 acres. Most important crops are rice, pulses, wheat, millet, and other grains; cotton, jute, oil-seeds; tea and sugar. Special attention is paid to afforestation by the state; most important timber is teak, found at its best in Burma. Mining is important: coal, petroleum (chiefly in Burma and Assam), manganese, gold, lead, silver, iron, copper; salt

and saltpetre are mined. Cotton is manufactured in Bombay; jute in Bengal; iron in Bihar and Orissa; woollen and silk goods, paper, and timber.

The sea-borne trade of India is second only to that of U.K. in Brit. Empire. Chief exports: jute, raw and manufactured; cotton, raw and manufactured; grain, pulses, and flour; tea; oil-seeds and oils; leather, hides, and skins. Trade is mainly with U.K., Japan, and U.S.A. There is a land trade with Nepal and the Shan States. Most of the railways are state owned. Good roads run in all directions. The largest ports are Calcutta, Bombay, Karachi, Rangoon, and Madras.

British India is divided into 15 provinces; Ajmer-Merwara, Andaman and Nicobar Islands, Assam, Baluchistan, Bengal, Bihar and Orissa, Bombay, Burma, Central Provinces and Berar, Coorg, Delhi, Madras, North-West Frontier Province, Punjab, United Provinces. There are also many Indian states, the largest being Rajputana, Kashmir, Hyderabad. France and Portugal have also small possessions in India. Tns. with over 200,000 inhabitants are the former cap., Calcutta (1,132,000, with suburbs), Bombay, Madras, Hyderabad, Rangoon, Lucknow, Delhi (cap. since 1911), Lahore, Ahmedabad, Bangalore, Karachi, Cawnpore, Poona. Area of all India, 1,805,332 sq. m.; pop. 318,942,500.

India, FRENCH. See FRENCH INDIA.

India, PORTUGUESE. Port. possessions in India comprise Diu, Daman, and Goa. Area, 1,638 sq. m.; pop. 550,000.

Indiana, N. Central State of U.S.A., lying between L. Michigan and Ohio R.; bounded n. by lake and state of Michigan, e. by Ohio, s. by Kentucky, w. by Illinois. Surface mostly undulating prairie, having range of sand-hills in n.; s. of this country is flat and marshy with shallow lakes; along Ohio R. a chain of hills ('Knobs') rises steeply. Most important rivers

are the Ohio and its trib. the Wabash. Climate equable, soil, excepting sandy regions, of Lake Michigan, exceedingly fertile, especially Wabash valley. Land is largely agricultural; chief crops, maize, wheat, oats, hay, and potatoes; also tobacco and fruits and vegetables of all varieties. Minerals include coal, limestone, and clay. Manufactures and industries are important, and include iron and steel foundries, slaughtering and meat packing, as well as woollen works and manufacturing of agricultural implements. Natural facilities for transport are provided by the Ohio and Wabash rivers and Lake Michigan. Cap. Indianapolis; other tns., Fort Wayne, Evansville, South Bend. Area, 36,354 sq. m.; pop. 2,930,400.

Indianapolis, cap. of Indiana, U.S.A., on White R., 100 m. n.w. of Cincinnati. Public buildings include federal building, state capitol, court house, and city hall. Important railway centre; large trade in agricultural produce; large slaughtering and meat-packing establishments, foundries, and machine shops. Pop. 364,000.

Indian Ocean, bounded w. by Africa, n. by Asia, e. by Malay Archipelago and Australia, divided in n. by India into Bay of Bengal (E.) and Arabian Sea (W.); mean depth, c. 2,300 fathoms; area, 29,340,000 sq. m. N. of the equator, direction of currents varies with monsoons; receives many important rivers from Asia; chief islands are Madagascar, Mauritius, Réunion, and Ceylon.

Indo-China, FRENCH. See FRENCH INDO-CHINA.

Indore. (1) Indian state in s.w. Central India; in n. is watered by R. Chambal and its tribs., and in s. by R. Nerbada; traversed from E. to W. by Vindhya range. Principal products, poppy, raw cotton, wheat, tobacco, and valuable timber; chief manufactures, cotton and opium. Area, 9,519 sq. m.; pop. 1,151,600. (2) Cap. of above; cotton manufacture; residence of Agent-General of Central India. Pop. 93,000.

Indre (*an' dr*). (1) Riv., France, trib. of Loire, in departments of Indre and Indre-et-Loire, rises on borders of dep. Creuse; length, 150 m. (2) Dep., central France; watered by Cher, Indre, and Creuse. Produces cereals, vines, sugar-beet; sheep are reared, iron ore is worked, and dep. furnishes best lithographic stones in France. Chief tn., Châteauroux. Area, 2,664 sq. m.; pop. 255,000.

Indre-et-Loire (*an-dr-i-lwâr*), dep., central France; drained by R. Loire and tribs. Grain, vines, beetroot, and hemp cultivated; wine, silk, pottery, and bariron manufactured. Chief tn., Tours. Area, 2,377 sq. m.; pop. 334,000.

Indus, riv., N. India, rises in Tibet, N. of Himalayas, near sources of Brahmaputra and Sutlej; flows n.w. through Tibet and Kashmir and enters Punjab; receives the waters of Rs. Jhelum, Chenab, Ravi, Beas, and Sutlej, and flowing s.w., enters Arabian Sea by delta. Length, c. 1,500 m.; drainage area, 372,000 sq. m. Is outlet for productions of n.w. India; one of best bridged rivers in India; subject to great floods; navigable to Attock in N.W. Frontier Prov.

Ing'ersoll, tn., Ontario, Canada, 19 m. E.N.E. of Hamilton; riv. jn. Pop. 5,000.

Ing'leborough, hill, W. Yorkshire, England, in Pennine Chain; rises from limestone plateau in which are numerous pot-holes, extensive caverns, and underground watercourses; alt. 2,373 ft.

Ing'leton, par. and vil., W. Yorkshire, England, 10 m. n.w. of Settle; centre for geologists and tourists. Pop. (par.) 2,400.

Ing'olstadt, tn., Bavaria, Germany, on R. Danube; univ., founded 1472; ironfounding; locomotives and machinery. Pop. 27,000.

Inhambane (*ên-yam-bã'nã*). (1) Dist., Portuguese E. Africa; coconuts, sugar-cane, rubber, and coffee. Area, 33,000 sq. m.; pop. c. 1,000,000. (2) Seapt. in above; exp. mafurra, oil-seeds, copra, and sugar. Pop. 20,000.

Inishmore, largest of Aran Isles, Galway, I.F.S., 30 m. s.w. of Galway; fishing. Pop. 1,800.

Inkerman, vil., Crimea, Russia, near E. extremity of Sevastopol harbour; here Anglo-French troops defeated Russian army (1854).

Inland Sea, Japan, narrow, island-studded sea separating Kyushu and Shikoku from Honshu; the three straits—Shimonoseki, Bungo, and Kii—are narrow and dangerous but strongly fortified, and sea is thus a safe and sheltered highway for Japan's commerce. Chief ports, Hiroshima, Okayama, Kobe. Length, c. 250 m.; width, 10 to 40 m.

Inn, Alpine trib. of R. Danube; rises in Grisons canton, Switzerland, flows N.E. through Engadine, Austrian Tirol, and S.E. Bavaria to enter Danube at Passau. Length, 315 m.

Innerleithen, tn., Peeblesshire, Scotland, 5 m. S.E. of Peebles; woollen manufactures; saline springs, said to be the St. Ronan's Well of Scott's novel of that name. Pop. 2,400.

Innersleben. See **BUCKHAVEN**.

Innsbrück (*ins'brook*), tn., Austria, cap. of Tirol, beautifully situated on R. Inn at head of Brenner Pass; tourist centre; univ. (founded 1677). Franciscan church (with monument to Maximilian I.), imperial castle, and Ferdinandum museum; textile, glass-painting, and mosaic industries. Pop. 56,000.

Inowroclaw (*in-oo-rots'waf*), formerly **HOHENSALZA**, tn., Poland, 60 m. N.E. of Poznan; salt works; iron-founding and manufacture of machinery and chemicals. Pop. 24,000.

Insterburg (*in'ster-boorg*), tn., E. Prussia, Germany, on R. Pregel, 35 m. E. of Königsberg; linen, machinery, leather, and beer. Pop. 39,000.

Interlaken (*in-ter-lä'ken*), tn., Berne, Switzerland, between Ls. Thun and Brienz; tourist resort. Pop. 3,000.

Inveraray, co. tn., Argyllshire, Scotland; on Loch Fyne; castle (rebuilt 1880) is seat of dukes of Argyll; fishing. Pop. 500.

Inverbervie. See **BRIVIE**.

Invercar'gill, tn., New Zealand, in extreme S. of S. Island; sawmills, foundries, meat-freezing works. Pop. 23,000.

Inverell, tn., N. New South Wales, Australia, 280 m. N. of Sydney; centre of wheat and maize dist.; wine; silver, tin, and diamond deposits in vicinity. Pop. 5,000.

Inveresk, par. and vil., Midlothian, Scotland, near Musselburgh; paper mills. Pop. of par. 21,200.

Invergordon, seapt., Ross and Cromarty, Scotland, 13 m. N.E. of Dingwall; naval base during Great War. Pop. 1,400.

Inverkeithing, royal burgh, Fife, Scotland, on Firth of Forth; ship-building, paper works. Pop. 3,200.

Inverkip, par. and vil., Renfrewshire, Scotland, 6 m. S.W. of Greenock; par. contains Gourock; wat.-pl. Pop. (par.) 13,000; (vil.) 600.

Inverness, royal burgh, seapt., and co. tn., Inverness-shire, Scotland, on R. Ness; 'cap. of the Highlands'; at end of Caledonian Canal; has coasting trade, woollen industries, engineering works, distilleries; riv. centre; important wool fair. Anc. Pictish cap. Pop. 22,600.

Inverness-shire, Highland co., Scotland, extending from Moray Firth on N.E. to Atlantic and Outer Hebrides on W. Surface is mostly wooded country, rough hill-grazing, heath, peat, and stony waste little cultivated; deer forests and grouse moors; excellent fishing; many wild glens. It is largest and most mountainous co. in Scotland; flat strip near Inverness gradually rises into mountain-land, culminating in Ben Nevis (4,406 ft.) in S.W. There are many rivers, the largest being Spey, Findhorn, Ness, Beauly, and Lochy. Among the numerous lochs are Ness, Morar (deepest in Brit. Isles), Shiel, Arkaig, Lochy, Erich, and Laggan. Water-power used in great hydro-electric schemes. Caledonian Canal traverses the county, through Glenmore, along line of geological 'fault.' Co. tn., Inverness. Area, 4,211 sq. m.; pop. 82,100.

Inverurie (*in-ver-oor'i*), royal burgh, Aberdeenshire, Scotland, at confluence of Don and Ury; cattle trade; manufactures paper, mineral waters; rly. workshops. Pop. 4,500.

Iona, or **ICOLMKILL** (*i-ō'na* or *i-kōm-kil'*), isl. at s.w. corner of Mull, Scotland, about $3\frac{1}{2}$ m. long and $1\frac{1}{2}$ m. wide; coast rocky and surface mostly rough. Associated with St. Columba and introduction of Christianity into Scotland; great centre of learning and religion from 6th cent. onwards; restored ruins of cathedral; chapel of St. Oran; Columba's tomb; numerous crosses and carved stones. Area, c. 2,000 ac.; pop. 200.

Ionian Islands (*i-ō'ni-an*), group of islands on w. coast of Greece, consisting of seven islands, Corfu, Cephalonia, Paxos, Santa Maura (Leukas), Ithaca, Cerigo (Cythra), Zante (Zakynthos); surface mountainous; highest peak, Monte Nero, 5,310 ft., in Cephalonia; subject to frequent earthquakes; rich in marble, sulphur, salt, coal, wine, olives, currants, fruit. Area, c. 1,100 sq. m.; pop. c. 263,000.

Iowa (*i-ō-wa*), N. Central State, U.S.A.; bounded n. by Minnesota; e. by Mississippi R., which separates it from Wisconsin and Illinois; s. by Missouri; w. by Rs. Missouri and Big Sioux (separating it from Nebraska and S. Dakota). Surface mostly prairie (average elevation 1,000 ft.). Iowa is divided into two drainage systems; the larger, on e., drained by tribs. of R. Mississippi; and that on w. by tribs. of R. Missouri. Climate is one of great extremes of heat and cold, but is healthy. Chief industry agriculture; maize, wheat, barley, oats, rye, potatoes, hay; live-stock; meat packing; dairy farming and poultry keeping. Valuable deposits of coal; other important minerals, gypsum, limestone, and clay. Chief tns., Des Moines (cap.), Dubuque, Sioux, Davenport, Council Bluffs, and Cedar Rapids. Area, 56,147 sq. m.; pop. 2,420,000.

Iowa City, city, Iowa, U.S.A., 120 m. n. of Des Moines; seat of Iowa

State Univ.; centre of rich farming and stock-breeding district. Pop. 15,000.

Ipek. See **Pec**.

Ipoh (*ē'pō*), tn., Perak, Malay Peninsula, c. 125 m. by rail n.w. of Kuala Lumpur; centre of tin mining. Pop. 38,000.

Ipswich (*ips'wich*). (1) Co. bor. and seapt., Suffolk, England, near head of Orwell estuary; several fine churches, including St. Mary-at-the-Tower; principal industries, manufacture of agricultural implements and chemical manures, engineering, brewing, and tanning. Pop. 87,600. (2) Tn., Queensland, Australia, 23 m. w. of Brisbane; originally known as Lime-stone; is the centre of agricultural and coal-mining dist. Pop. 20,500.

Iquique (*ē-kē'kū*), seapt., Chile; exports large quantities of nitrate of soda. Has been frequently devastated by earthquakes. Pop. 37,000.

Iquitos (*ē-kē'tos*), tn. and riv. port, Peru, on Upper Amazon R.; has shipyard and floating dock; exports include rubber, tobacco, cotton, and soap. Pop. c. 10,000.

Irapuato (*ē-rap-uāt'ō*), tn., Guanajuato, central Mexico, 170 m. n.w. of Mexico City; anc. churches and convents; in mining and agricultural dist.; rly. jn. Pop. 21,000.

Iraq (*ē-rāk'*), official name for Mesopotamia, kingdom lying mainly between rivers Euphrates and Tigris, but with important desert region stretching westward to Trans Jordan. Surface consists of low-lying plain. Climate hot and dry in summer, cold in winter; rainfall, mainly in winter, very scanty. Cultivation is possible chiefly under irrigation. Schemes to restore anc. canals and to develop new areas will vastly increase productive area. Communications are being rapidly extended. Chief railway is that between Basra and Baghdad. Chief products are dates, rice, wheat, barley, fruits, live-stock, and cotton. Important oil-fields. Chief town is Baghdad, and chief port, Basra. Area, 143,250 sq. m.; pop. 2,849,000.

Irbít (*ér-bét'*), town, Ural Area, Russia, E. of Ural Mts., 100 m. N.E. of Sverdlovsk; great fair (instituted 1643), second only to that of Nijni Novgorod. Pop. 12,000.

Ireland, one of Brit. Isles, w. of Great Britain, bounded N., w., and s. by Atlantic Ocean, N.E. by North Channel, E. by Irish Sea and St. George's Channel. Coast-line about 2,200 m., no place more than 50 m. from sea. Island has basin-shaped central plain, 250 to 300 ft. in height, nearly surrounded by mountainous coasts; this configuration results in large area of bogland. Rivers are (N.) Foyle, Bann; (E.) Laggan, Boyne, Liffey; (S.) Barrow, Suir, Blackwater, Lee; (centre and W.) Erne, Moy, Galway, and Shannon. Chief lakes (loughs): Neagh, Erne, Allen, Ree, Derg, Conn, Mask, Corrib, Killarney. Climate is generally moist and warm, with more rainfall and warmth on W. than on E. About 3,000,000 ac. are mountain-land, peat bog, or marsh; greater part of remainder permanent grassland; breeding and rearing of live-stock of great importance; pig-breeding gives rise to valuable trade in bacon, ham, and pork. Trade in dairy produce is increasing. Chief crops, oats, potatoes, turnips, and flax. On E. coast there are valuable fisheries (mackerel, cod, ling, and herring); salmon fisheries on coasts and rivers. Minerals include coal, slate, marble, iron, bauxite, and silver, but these are not worked to any great extent. The lack of coal has been a great handicap to Irish industry, but a considerable linen industry has developed round Belfast and in Londonderry. Dublin manufactures poplin. Domestic and convent industries in hand-made lace and embroidery; spinning of wool and hand-loom weaving of woollens, carpets, rugs, are noted. Brewing of porter and ale and distilling are also important. Belfast and Londonderry have ship-building.

There are 3,750 m. of rly. operated by six companies. The largest is the

Great Southern Railways Co., which controls all the lines entirely within the I.F.S.; next in importance is the Great Northern Railway Co., which has lines running from Belfast to Dublin and Londonderry and to the S. part of N. Ireland. The N. cos. of N. Ireland are served by the London, Midland, and Scottish Rly. Co. under the control of the Northern Counties Committee. The other groups are the Donegal Rly. Co., Londonderry and Lough Swilly Rly. Co., and the Belfast and Co. Down Rly. Co. There is an excellent canal system 848 m. in length. Two canals (Royal, c. 100 m.; and Grand, 208 m. including branches) connect Dublin with the Shannon, which is itself navigable, with the aid of a canal near Limerick, from Lough Allen to the sea. Atlantic liners by the N. passage call at Moville, those by the S. at Cobh (Queenstown).

Ireland is divided politically into Northern Ireland (consisting of the counties of Antrim, Armagh, Down, Fermanagh, Londonderry, and Tyrone), and the Irish Free State (counties Cavan, Donegal, Monaghan, Carlow, Dublin, Kildare, Kilkenny, Offaly, Longford, Louth, Meath, Leix, Westmeath, Wexford, Wicklow, Clare, Cork, Kerry, Limerick, Tipperary, Waterford, Galway, Leitrim, Mayo, Roscommon, and Sligo). N. Ireland has a parliament of its own and also sends representatives to Westminster. The I.F.S. has the status of a Brit. Dominion. The area of Northern Ireland is 5,236 sq. m.; pop. (1926) 1,256,000; Belfast (cap.), 415,000. Area of Irish Free State, 26,600 sq. m.; pop. (1926) 2,971,000; Dublin (cap.) 419,000.

Irish Free State. See IRELAND.

Irish Sea, sea between Great Britain and Ireland, connected with Atlantic Ocean by St. George's Channel on S. and by North (or St. Patrick's) Channel on N. Length, 110 m.; breadth, 150 m.; maximum depth, 850 ft.

Irkutsk (*ir-kootsk'*), tn., Siberian Area, U.S.S.R., on R. Angara, on Trans-Siberian railway; chief trade

centre of E. Siberia, with important traffic in tea and furs. Chief industries are brewing, timber cutting, flour milling, and manufacture of leather goods. Pop. 99,000.

Irlam, urb. dist., Lancs, England, 8 m. S.W. of Manchester; candles, glycerine, and soap. Pop. 12,900.

Ironbridge, tn., Salop, England, 13½ m. by rail S.E. of Shrewsbury; forms part of tn. of Madeley; named from bridge over R. Severn, the first iron bridge ever built; collieries and ironworks in vicinity. Pop. 2,900.

Fronton, city, Ohio, U.S.A., 100 m. S.E. of Columbus; iron, coal, and fireclay; foundries, manufacture of machinery. Pop. 14,000.

Ironwood, city, Michigan, U.S.A., 7 m. S.W. of Bessemer; iron mining and lumbering. Pop. 16,000.

Irrawaddy, great river, Burma, formed by junction of two streams which rise in N. of province; general course from N. to S.; discharges into Bay of Bengal between Gulf of Martaban and Cape Negrais through extensive delta. Main tributary, Chindwin. Riv. is main highway of commerce, being navigable from its mouth as far as Bhamo (c. 900 m.) for large steamers, and of enormous potential value for irrigation. Tns. on its banks, Rangoon, Bassein, Mandalay, Bhamo. Length, c. 1,300 m.

Irlth'lingborough, urb. dist., Northamptonshire, England, 4 m. N.E. of Wellingborough; boots and shoes; ironstone quarries. Pop. 4,700.

Irt'ish, trib. of R. Ob; rising in Altai Mts., flows N.W. through Lake Zaisan, joins Ob after course of c. 2,600 m., of which 2,000 m. are navigable for about two-thirds of the year; passes many important towns, including Omsk, where it is crossed by Trans-Siberian railway.

Iron (*î-roon*), frontier tn., Spain, 8 m. E. of San Sebastian; important custom-house; hot mineral springs; ironworks, potteries, and paper mills. Pop. 14,000.

Ir'vina. (1) Royal bur. and seapt., Ayrshire, Scotland; shipbuilding,

engineering, foundries, and chemical works. Pop. 12,000. (2) Riv., Ayrshire, Scotland; rises near Drumclog, and flows W. to Firth of Clyde; length, 30 m.; Kilmarnock, Galston, and Irvine on its banks.

Ir'vington, tn., New Jersey, U.S.A.; residential suburb of Newark; smelting; lumber mills. Pop. 57,000.

Isabela (*is-a-bi'la*), province, Luzon, Philippines; mountainous and forest-clad; rice, maize, sugar, coffee, tobacco. Cap. Ilagan. Area, c. 4,000 sq. m.; pop. 113,000.

Isarta (*îs-bar'ta*), (anc. BARIS), tn., Konia, Asia Minor, 64 m. N. of Adalia; vines and poppies cultivated; carpet weaving. Pop. 45,000.

Ischia (*îs'hi-a*), volcanic isl. at N. entrance of Bay of Naples, Italy; produces fruit and corn; wine and oil; straw plaiting and fishing are chief industries; subject to earthquakes. Area, 26 sq. m.; pop. 28,000. Chief tn., Ischia. Pop. 8,000.

Ischl (*îsh'l*), or BAD-ISCHL, wat.-pl., Upper Austria, 30 m. S.E. of Salzburg; saline baths; salt produced from brine; villa of the former imperial family. Pop. 10,000.

Isghem (*îs-gem*), tn., W. Flanders, Belgium, c. 10 m. N. by W. of Courtrai; manufactures textiles. Pop. c. 14,000.

Isère (*î-zâr*). (1) Riv., France, trib. of Rhone; flows through Savoie, Isère, and Drôme; length, 180 m. (2) Dep., S.E. France; mountainous, especially towards S.; produces cereals, wine, fruit, hemp, butter, and cheese; rich in minerals, having mines of iron, coal, lead, silver, and copper; principal industry, glove-making, is centred in Grenoble; other industries: metal working, paper making, silk weaving, cement works. Cap. Grenoble. Area, 3,178 sq. m.; pop. 558,000.

Isertiohn (*î-ser-tîon*), tn., Westphalia, Prussia, 14 m. S.E. of Dortmund; iron, steel, and metal works; needles, chemicals, and furniture. Pop. 30,000.

Isfahan (*îs-fa-hân*), tn., Persia, on Zaindeh R., 210 m. S. of Tehran; former cap. of Persia; surrounded by

gardens and orchards; manufactures include woven fabrics, gold, silver, and leather ware. Pop. c. 100,000.

Ishpeming (*ish'pem-ing*), city, Michigan, U.S.A., 15 m. w.s.w. of Marquette, its port on Lake Superior; iron-mining centre, gold, silver, and marble; manufactures machinery, lumber, etc. Pop. 11,000.

Iskanderun. See ALEXANDRETTA.

Iskelib (*is'kel-ib*), tn., Angora, Asia Minor, 100 m. n.e. of Angora; salt springs. Pop. 54,000.

Islay (*il'ā*), isl., Argyllshire, Scotland; one of Inner Hebrides; dairy farming, stock raising, whisky distilling; slate and marble; popular summer resort. Chief tn., Bowmore. Area, 235 sq. m.; pop. 6,500.

Isle of Dogs, peninsula on l. bk. of Thames, London, England, included in bor. of Poplar; here are W. India and Millwall docks and large ship-building yards.

Isle of Man. See MAN, ISLE OF.

Isle of Wight. See WIGHT, ISLE OF.

Isleworth (*is'el-würth*), par. and vil., Middlesex, England, 10 m. s.w. of St. Paul's; part of Greater London; centre of great fruit and flower growing dist.; soap works. Pop. (par.) 30,000.

Islington (*is'ling-ton*), metropolitan bor. and par., London, England, 2 m. n. of St. Paul's. Annual horse and cattle shows; metropolitan cattle market; London Fever Hospital, and Holloway and Pentonville prisons. Pop. 321,700.

Islip (*is'lip*), tn., Long I., New York, U.S.A.; summer resort. Pop. 21,000.

Ismail or Ismail, tn., Bessarabia, Romania, on an arm of R. Danube, 40 m. from Black Sea; cereals, wool, tallow, and hides; flour milling. Pop. 37,000.

Ismailia (*is-ma-ē'li-a*), tn., Lower Egypt, on n. shore of Lake Timsah and w. bank of Suez Canal; is seat of administration of Suez Canal. Pop. c. 10,000.

Isonzo, riv. of Illyria, Italy; enters Gulf of Trieste by two mouths;

length, 81 m. Very important during Great War.

Issiq Kōl (*is'ik kool*), lake, Khirgiz, U.S.S.R., lies between spurs of the Tien Shan mountains, 250 m. s. of Balkash; length, 115 m.; breadth, 38 m.

Issoudun (*ēs-oo-dun*), tn., Indre, France, 22 m. w.s.w. of Bourges; manufactures leather, parchment, woollens, linen, and agricultural implements. Pop. 10,000.

Issy (*ē-sē*), tn., Seine, France, 3 m. s.w. of Paris; distilleries, brass and chemical works; silk and oil cloths. Pop. 23,000.

Istanbul. See CONSTANTINOPLE.

Is'tria, peninsula in n.e. Adriatic, formerly a margravate of Austria now part of Italian province of Pola; rocky coasts; country generally mountainous, olive oil, wine, fruits; mining, cattle raising, fishing. Area, 1,549 sq. m.; pop. 299,000.

Italy, kingdom in s. Europe; peninsula c. 700 m. long, and from 100 to 150 m. broad. It is bounded on n. by the long chain of the Alps. The islands of Sicily, Sardinia, Elba, and c. seventy small ones belong to Italy. The n. (Lombardy) is largely the basin of the Po. Just n. of the mouth of the Po is that of the Adige. The long chain of the Apennines, a continuation of the Alps, runs through the peninsula. The Apennines spread out into a number of ranges in Central Italy, and have thus broken up the country and delayed political union. The two rivers of Central Italy are the Arno and the Tiber. The Po is the only Italian river that surpasses the Arno in size. S. of Rome is the Campagna, an open plain. S. Italy is mostly mountainous, particularly Calabria. The only important lakes are Is. Garda, Maggiore, and Como in the n.

Climate varies greatly. The n. in summer is as hot as the s., but in winter it is as cold as n. Europe. Oranges and lemons grow on the coast of Calabria, but a few miles inland the climate resembles that of England.

The great scourge of the s. is malaria, which is, however, being fought and reduced. Earthquakes at intervals convulse the s. (especially Calabria and Sicily); Vesuvius and Etna are active volcanoes.

Agriculture is the principal industry; chief crops are maize and rice (in n.), wheat, vines, olives, oranges, lemons, chestnuts, almonds; flax and hemp are grown, and tobacco under state control. Manufactures are silk, cotton, and motor-cars, woollens, furniture, glass (at Venice), porcelain, beet sugar, olive oil, paper. Coral- and tunny-fishing employ over 26,000 fishermen. Minerals are plentiful, the most important being sulphur ore, lead, and zinc. Carrara and Massa produce marble. Exports: silk and artificial silk, cotton, vegetables and fruit, wool, milk and cheese products, vehicles, hemp, hides, sulphur, flour, wheat pulp. Cap. Rome. Area, 119,710 sq. m.; pop. 41,168,000.

Italy has several overseas possessions, which include Eritrea, part of Somaliland, and Italian Libya, in Africa.

Itasca Lake. See MISSISSIPPI.

Itaca (it'a-ka). (1) Now THIAKI, one of Ionian islands, Greece; currants and oil; supposed to have been home of Odysseus. Area, 44 sq. m. (2) City, New York, U.S.A., 45 m. s.s.w. of Syracuse; seat of Cornell Univ.; manufactures include guns, typewriters, and clocks. Pop. 19,000.

Itzehoe (it'sā-hō), tn., Schleswig-Holstein, Prussia, 32 m. n.w. of Hamburg; oldest town in Holstein (founded 809); 12th cent. church; metal-founding and shipbuilding; sugar, chicory, tobacco. Pop. 20,000.

Ivanovo-Voznesensk (ē-van-ōs'ō vos-nēs'ensk). (1) Prov., central Russia; drained by R. Volga; much of it forested; in s.w. rye, oats, wheat, and barley are grown. (2) Chief tn. in above, 150 m. n.e. of Moscow; con-

sists of Ivanov on r. bk. of Uvod, and Voznesensk on l. bk.; cotton trade; woollen, iron, and chemical works. Pop. 111,000.

Iveston (i'us-ton), par. and vil., Durham, England, 9 m. n.w. of Durham; coal mines and iron foundries. Pop. (par.) 5,100.

Iviza (ē-vē'tha or ē-vē'sa). (1) One of Balearic Islands, Mediterranean Sea; hilly and well-wooded; salt (produced by evaporation), cereals, fruit. Area, 230 sq. m.; pop. 24,000. (2) Cap. of above; has cathedral and a fortress built by Philip v. Pop. 7,000.

Ivory Coast, or Côte d'Ivoire, Fr. colony, n. coast of Gulf of Guinea, between Liberia and Gold Coast, part of Fr. West Africa. Surface rises from the low coastal region to mountainous Kong terr. in n.e.; much of interior densely forested. Maize, fruit, gold, coffee, cocoa, rubber, mahogany are among products. Among largest tns. are Grand Bassam, Bingerville (cap.), Abidjan, Assinie. Area, c. 122,000 sq. m.; pop. 1,725,000.

Ivrea (ē-vrē'a), tn., Piedmont, Italy, 28 m. n.n.e. of Turin; 10th cent. cathedral; silk and cotton manufactures; large markets. Pop. 12,000.

Ivry-sur-Seine (ē-vrē'soor-sān), tn., Seine, France, 3 m. s.e. of Paris; organs, rubber, chemicals; iron and steel works. Pop. 41,000.

Ivybridge, urb. dist., Devon, England, 10 m. e. of Plymouth; paper mills. Pop. 1,600.

Ixmiquilpan (ēs-mē-kēl-pān'), town, Mexico, 80 m. n. of Mexico City; silver mines. Pop. c. 13,000.

Izhevsk', tn., Votjak Terr., Russia, 150 m. s.w. of Perm'; iron foundries. Pop. 63,000.

Izmid, tn., Asia Minor, near head of Gulf of Izmid, Sea of Marmara; cereals, silk, and tobacco; on Anatolian railway. Pop. 56,000.

Izmir. See SMYRNA.

J

Jabalpur. See JUBBULPORE.

Jablonec (nad Nisou) (yábl'on-ets nád nyě'sō) (German *Gablonz*), tn., N. Bohemia, Czechoslovakia, 7 m. S.E. of Liberec; glass industries; textiles; Gablonz ware. Pop. 27,000.

Jack'son. (1) City, Michigan, U.S.A., 63 m. W. of Detroit; manufactures locomotives, automobiles, machinery. Pop. 55,000. (2) City, Tennessee, U.S.A., 86 m. N.E. of Memphis; large cotton trade; manufactures engines, cotton-seed oil, sewing machines. Pop. 19,000. (3) City, cap. of Mississippi, U.S.A.; centre of rich cotton-growing region, and manufactures cotton-seed products and agricultural implements. Pop. 48,000.

Jack'sonville. (1) City, N. Florida, U.S.A., on St. John's R.; commercial centre of state; exports lumber, naval stores, kaolin, phosphates, fish, fruit. Pop. 130,000. (2) City, Illinois, U.S.A., 35 m. W. of Springfield; rly. shops, woollen mills. Pop. 15,500.

Jacobabad', frontier tn., N. Sind, Bombay, India; hottest place in India; caravan trade. Pop. 11,000.

Jade (yá'dá), or JAHDE, bay, N.W. Oldenburg, Germany, a few miles W. of Weser estuary; on W. is Wilhelmshaven; area of bay, 75 sq. m.

Jaen (há-en'). (1) Prov., S. Spain, on S. slopes of Sierra Morena; watered by Guadalquivir, Segura, etc.; one of most fertile dists. of Spain, producing oil, wine, and almonds; has lead, silver, and iron mines. Area, 5,203 sq. m.; pop. 637,500. (2) Cap. of above; Moorish ruins; leather, soap, weaving, and milling; exp. wine, fruit, and vegetables. Pop. 36,000.

Jaff'a, or JOPPA, port, Palestine; rly. to Jerusalem; exp. fruit (esp. oranges), olive oil, barley, sesame, and wine; occupied by Allenby's forces on march to Jerusalem, 1917. Pop. 48,000.

Jaff'na, tn. and port on isl. of same name, N. Ceylon; tobacco, curry stuffs, mangoes. Pop. 42,500.

Jägerndorf. See KRNOV.

Jagersfontein (yá-gers-fon-fín'), tn., Orange Free State, S. Africa, 60 m. S.W. of Bloemfontein; in neighbourhood are Klipfontein diamond mines. Pop. 4,000.

Jah'rum, tn., Fars, Persia, 100 m. S.E. of Shiraz; dates and tobacco. Pop. 15,000.

Jaipur (jī-poor'). (1) Indian state, Rajputana, India; greater part is vast sandy plain; rich in mineral deposits; copper, marble, iron, cobalt, and salt; one of wealthiest and best administered of Indian states. Area, 15,579 sq. m.; pop. 2,340,000. (2) Cap. of above, 150 m. S.W. of Delhi; the 'rose-red city'; manufactures gold enamelled work, Oriental metal work, carpets, and muslin; much visited by tourists. Pop. 120,300.

Jalalabad', or JELLALABAD, tn., Afghanistan, near Khyber Pass, between Kabul and Peshawar; trades in fruit and timber. Pop. c. 6,000.

Jalapa (há-láp'a), tn., Mexico, 50 m. N.W. of Vera Cruz; pottery, leather; medicinal plant from which jalap is prepared grows wild in dist. Pop. 28,000.

Jalisco (há-lis'ko), Pacific state, Mexico; chief riv. Lerma (Santiago); partly volcanic; unhealthy coast lands; mining, stock raising, cereals. Cap. Guadalajara. Area, 33,492 sq. m.; pop. 1,200,000.

Jal'na, tn., N.W. Hyderabad, India, 38 m. E. of Aurangabad; famous fruit gardens. Pop. 17,000.

Jalpaiguri (jál-pī'gaur-i). (1) Dist., Bengal, India, adjoining Bhutan; fertile; tea, rice, jute, timber. Area, 2,962 sq. m.; pop. 936,500. (2) Tn., cap. of above; trading centre. Pop. 15,000.

Jama'ca, largest and most im-

portant of Brit. W. Indies; surface mountainous, being crossed from E. to W. by Blue Mts., rising to 7,423 ft.; climate pleasant and healthy; produces fruits (especially bananas), sugar, coconuts, coffee, ginger, pimento, cocoa, rum, and timber; cattle and horses raised; inhabitants include whites, Negroes, Indians, Chinese, half-breeds; rly. mileage is 210. Cap. Kingston. Area, 4,450 sq. m.; pop. 858,000.

Jamestown. (1) City, New York, U.S.A., 60 m. s.w. of Buffalo; furniture, woollen goods; summer resort. Pop. 45,000. (2) Tn., cap. of isl. of St. Helena; coaling station. Pop. 2,500.

Jamkhandi (*jum-khā'ndē*), Indian state, Bombay, India; cereals produced and cotton manufactured. Cap. Jamkhandi, 110 m. N.E. of Goa. Pop. of tn., 13,000; of state, 101,500.

Jamrud, fort and cantonment, N.W. Frontier Prov., India, at mouth of Khyber Pass. Pop. 6,500.

Jamshedpur, tn., Bihar and Orissa, India, 130 m. W. of Calcutta; has Tata iron and steel works. Pop. 57,000.

Janesville, city, S. Wisconsin, U.S.A.; machinery, textiles, shoes. Pop. 18,500.

Janina. See YANNINA.

Januay (*hā-nē-wā'*), tn., Panay I., Philippines, 19 m. N.W. of Iloilo; silk and cotton; sugar mills. Pop. 25,000.

Janjira, Indian maritime state, Bombay, India; rice, coconuts; fishing. Chief tn., Janjira, 40 m. S. of Bombay. Area, 324 sq. m.; pop. 88,000.

Jan Mayen (*yān mē'en*), isl. between Iceland and Spitsbergen; annexed by Norway, 1929; volcanic origin (Beerberg, 8,000 ft., is extinct volcano); glaciers; seal and whale fisheries. Length, 35 m.

Ja'ora. (1) Indian state, Central India; millet, cotton, maize. Area, 600 sq. m.; pop. 86,000. (2) Cap. of above, 75 m. N.W. of Indore. Pop. 17,500.

Japan' (Jap. *Nippon*, 'eastern land'), empire, E. Asia; consists of Japan Proper, a chain of islands including Kuriles (Jap. *Chishima*), Hokkaido, Honshu, Shikoku, Kyushu, and Ryukyu group, also S. Sakhalin (Jap. *Karafuto*), Formosa (Jap. *Taiwan*), Pescadores (Jap. *Bokoto*), Korea (Jap. *Chosen*) on mainland, Caroline, Marshall, and Ladrone groups in N. Pacific Ocean. To these may be added Kwantung, S. Liaotung pen. (including Port Arthur and Dairen), leased from China.

Surface generally mountainous, with many active and dormant volcanoes, and country is subject to frequent earthquake shocks, that of Sept. 1923 being especially destructive; among highest peaks is beautifully shaped cone of Fuji-san (12,400 ft.); hot mineral springs abound. The outline of all the islands is much broken; rvs. short and rapid, and in summer torrential, from the heavy rains and melting of snow; useful for irrigation, but not for navigation. Climate varies greatly with the latitude; in main islands, temp. ranges from c. 5° F. to 80° in N., and from 42° to 98° in S.; rainfall increases from 40 in. in N. to over 80 in S., and in some places rises to 150; N. Pacific current, known as the Kuro Siwo ('black tide'), passing N. along whole S.E. coast, makes this much warmer than N.W.; typhoons are most destructive in autumn; snowfall very heavy in N.W.

Trees include oak, beech, pine, elm, cedar, wax tree, chestnut, maple, sago-palm, and bamboo; cherry tree largely cultivated, and paper-mulberry and lacquer tree are characteristic and of great economic value; fruits include oranges, grapes, persimmons, and peaches. Principal industries are agriculture, silk production, forestry, and fisheries; agriculture employs c. 60 per cent. of inhabitants; cultivation greatly hampered by difficulties of communication. Of cultivated area (exclusive of Formosa) c. 60 per cent. is under rice; two or three crops raised on same field every year;

cattle, horses, pigs, and goats are reared, but few sheep. Minerals are important; coal production is increasing, and silver, copper, antimony, gold, sulphur, iron, graphite, and china-clay are worked, as well as petroleum; manufactures include cotton, silk, lacquer-ware, bronzes, mats, carpets and rugs, porcelain, pottery, bamboo and cane work, matches, glass; shipbuilding; iron and steel.

Japan is one of great naval powers of the world; has large mercantile marine; chief exports: silk and silk goods, cotton goods, and pottery; principal exports to United Kingdom are silk, fish, tinned peas, soya bean oil; principal imports from U.K. are textiles, iron and steel, chemicals and dyes, machinery.

The Japanese are of Mongoloid stock, and a striking difference exists between the upper and lower classes; former are white or light yellow in colour, with oval face, obliquely set eyes and small mouth; the latter are darker in complexion and stronger in build, and have coarser features and straight eyes.

The largest tns. are Osaka, Tokyo (cap.), Nagoya, Kyoto, Kobé, Yokohama; most important ports, Yokohama, Kobé, Osaka, Moji, and Nagasaki. Area of Japan Proper, 152,357 sq. m.; pop. 59,700,000. Total area of empire, 265,129 sq. m.; total pop. c. 83,500,000.

Jaroslav. See YAROSLAV.

Jaroslau (*yá-ró'slaw*), tn., Galicia, Poland, on R. San, 60 m. w.n.w. of Lwow; pottery, cloth, brandy, confectionery. Pop. 20,500.

Jar'row, tn. and riv. port, Durham, England, on r. bk. of R. Tyne; shipbuilding, foundries, paper, and chemical works. Pop. 32,000.

Jashpur'. (1) Indian state, Central Provs., India; ebony and other timber. Area, 1,963 sq. m.; pop. 154,500. (2) Cap. of above, 85 m. N. by E. of Sambalpur. Pop. 1,700.

Jassy (*yásh'z*), cap., dep. of same name, Romania, on R. Prut; trade

in cereals, petroleum, salt, metals, fruits, wine, cattle. Pop. 185,000.

Játiva (*há-ti-vá*), city, E. Spain, 35 m. s.s.w. of Valencia; fruit culture; oil, wine. Pop. 14,500.

Jauer (*you'er*), tn., Silesia, Prussia, 38 m. W. of Breslau; leather, carpets, machinery. Pop. 12,500.

Jaunpur'. (1) Dist., United Provs., India; traversed by R. Gumti; highly cultivated; rice, sugar-cane, tobacco. Area, 1,551 sq. m.; pop. 1,155,000. (2) Tn., cap. of above, on R. Gumti, 35 m. n.w. of Benares; perfumes, papier-mâché. Pop. 33,000.

Ja'va, isl., Dutch E. Indies; volcanic mts. run from end to end of isl.; many active volcanoes, some peaks reaching 12,000 ft.; in N. are fertile alluvial plains; rivs. short and commercially unimportant; climate unhealthy in low-lying dists., hot and damp, but heat tempered by regular sea breezes; average temp. in lower parts is 78° F.; rainfall about 75 in. Mts. covered with trees to 10,000 ft.; forests produce teak, coconuts, palms, bamboos, spice trees; cultivated products include rice, maize, cassava, sugar, coffee, tea, tobacco, rubber; minerals include petroleum, coal, salt, sulphur; exports, chiefly to Holland, include sugar, rubber, coffee, tea, tobacco, cinchona, tin; trade mainly carried on by Arabs and Chinese, the native inhabitants being engaged chiefly in agriculture; manufacture of coarse cloth, mats, and soap. Cap. Batavia. Area, 50,811 sq. m.; pop. 37,434,000.

Jaworów (*yá-wor'ow*), tn., Galicia, Poland, 30 m. w.n.w. of Lwow; brewing, pottery. Pop. 9,000.

Jaworzno (*yá-wosh'no*), tn., Poland, 30 m. n.w. of Cracow; coal mines, petroleum wells; zinc-smelting works. Pop. 13,000.

Jaxartes. See SIR DARYA.

Jazira, AL (*yá-zí-rá*), country between rivs. Tigris and Euphrates, n.w. of Baghdad.

Jed'burgh, royal burgh, Roxburghshire, Scotland; ruins of beautiful abbey, founded 1118; tweeds and

other woollens; tanning. Pop. 3,100.

Jedda. See JIDDA.

Jefferson City, cap. of Missouri, U.S.A.; agricultural implements, shoes, clothing, tiles; rly. workshops. Pop. 14,500.

Jeffersonville, city, s. Indiana, U.S.A.; rly. engineering works. Pop. 11,000.

Jelgava (yel'ga-va), formerly MITAU, tn., Latvia, 30 m. s.w. of Riga; linen factories; soap works. Pop. 28,500.

Jellalabad. See JALALABAD.

Jemappes (zhé-māp'), tn., Belgium, 3 m. w. of Mons; coal and iron mining. Famous for victory of French over Austrians (1792). Pop. 15,000.

Jena (yā'nā), tn., Thuringia, Germany, on R. Saale; univ. founded in 1558; trade in books, pianos, and optical instruments. Scene of defeat of Prussians by Napoleon (1806). Pop. 54,000.

Jer'ablus (anc. *Carchemish*), tn., N. Syria, Asia, on R. Euphrates, 65 m. N.E. of Aleppo; Baghdad rly. crosses river here.

Jer'ba, isl., Gulf of Qabes, off Tunisian coast, Africa; 'isl. of lotus-eaters'; sponges, dates, olives, silk-and-wool material. Area, 425 sq. m.; pop. c. 90,000.

Jerez, or JEREZ DE LA FRONTERA (*hā-reth' dā la fron-tā'ra*), formerly XERES, tn., Cadiz, Spain; famous for *sherry* (name derived from *Jerez*); relics of Moorish occupation. Pop. 65,000.

Jer'icho, vil., Palestine, 5 m. N. of Dead Sea; taken by Israelites under Joshua; later destroyed by Romans; rebuilt by Hadrian; ruined during Crusades; captured by Brit. forces in Great War (Feb. 21, 1918). Pop. 1,000.

Jer'sey, largest of Channel Islands; surface undulating, mostly cultivated; potatoes, tomatoes; good fishing; famous cattle; dairy produce; holiday resort. Chief tn., St. Helier. Area, 45 sq. m.; pop. 50,000.

Jer'sey City, tn., New Jersey, U.S.A., on R. Hudson, practically a suburb of New York; important rly. terminus;

excellent harbour; meat packing; iron, steel, machinery, chemicals, tobacco, pottery. Pop. 16,000.

Jeru'salem, cap., Palestine; stands on hills of Zion, Acra, Moriah, and Bezetha, and thus a natural fortress almost impregnable in ancient times; sacred city of Jews and Christians; in Great War Jerusalem was surrendered by Turks to Allenby (Dec. 9, 1917); many improvements carried out in and around the city; univ. (on Mt. Scopus) opened in 1925 for Jewish and Oriental studies. Pop. 63,000.

Jervis Bay, detached portion of Federal Terr., on coast of New South Wales, Australia; naval college; future port of Canberra, 123 m. distant by rail. Area, c. 4,000 ac.

Jes'selton, port, Brit. N. Borneo, on S. China Sea; rly. to interior.

Jhang. (1) Dist., Punjab, India; drained by Rs. Chenab, Jhelum, and Ravi; grain, cotton, oil-seeds. Area, 3,452 sq. m.; pop. 571,000. (2) Tn., cap. of above; leather, soap, brass work. Pop. 30,500.

Jhansī (jān'sā). (1) Dist., United Provs., India, between E. and W. section of Central India; produces cereals and cotton; frequently suffers from famine. Area, 3,634 sq. m.; pop. 606,500. (2) Cap. of above, 110 m. S.W. of Cawnpore; rly. jn.; has fort. Pop. 66,500.

Jhelum (jā'lum), or JEHLAM. (1) Riv., India; unites with Chenab; one of the 'five rivers' of Punjab; irrigates large areas. (2) Dist., Punjab, India, crossed by Salt Range and Jhelum R.; cereals, oil-seeds. Area, 2,773 sq. m.; pop. 477,000. (3) Tn., cap. of above, on R. Jhelum, 100 m. N. of Lahore; trades with Kashmir. Pop. 18,500.

Jibuti (zhé-bū'tē), cap., Fr. Somaliland, Africa, on Gulf of Aden; fine harbour; exports coffee, rubber, ivory, live-stock; rly. to Abyssinia. Pop. 8,500.

Jichin (yēch'ēn), tn., Bohemia, Czechoslovakia, 60 m. N.E. of Prague; agricultural machinery, leather. Pop. 10,500.

Jid'da, port, Hejaz, Arabia, on Red Sea, 50 m. w. by s. of Mecca; pilgrims for Mecca land here; extensive harbour; exports mother-of-pearl, coffee, carpets, balsams. Pop. 25,000.

Jihlava (*yé-láiv*), formerly IGLAU, tn., Moravia, Czechoslovakia, 50 m. w. of Brno; trades in timber and grain; textiles, leather, glass. Pop. 28,500.

Jind (*jénd*), Indian state, Punjab, India; chief products, grain and cotton; principal manufactures, gold and silver jewellery, cloth, leather. Cap. Sangrur (pop. 12,000); former cap. Jind, 75 m. n. of Delhi (pop. 11,000). Area, 1,259 sq. m.; pop. 308,500.

Jitomir (*zhé-tó-mér*), tn., Ukraine, U.S.S.R., 70 m. w. of Kiev; iron smelting. Pop. 77,000.

Joachimsthal (*yó-á-chims-tál*), tn., Bohemia, Czechoslovakia, on s. slopes of Erzgebirge, 10 m. n. of Carlsbad; mines yield silver, nickel, bismuth, uranium; first German silver dollars ('thalers') coined here. Pop. 8,000.

Jodhpur (*jod-poor*), or MARWAR. (1) Indian state, Rajputana, India; largely desolate, sandy country, watered by Luni and its affluents; produces salt (from Sambhar and other salt lakes), tin, iron, marble, cereals. Area, 34,963 sq. m.; pop. 1,842,000. (2) Cap. of above; walled town; has a fortress. Pop. 73,500.

Johan'nesburg, tn., Transvaal, S. Africa; largest city in S. Africa; commercial and gold-mining centre; in Witwatersrand goldfield; alt. 5,740 ft.; founded in 1886 on discovery of gold; rly. centre; other industries: printing, milling, brewing, and iron and brass founding. Pop. 302,000 (171,000 whites).

Johannisberg (*yó-han'-*), vil. and castle, Hesse-Nassau, Prussia, 12 m. w. of Mainz; vineyards (52 ac.) produce the famous Johannisberger wine.

John o' Groat's, or **John o' Groat's House**, 2 m. w. of Duncansby Head, Caithness, Scotland; used to denote most n. part of Great Britain; named from former octagonal house of John Groat, who received royal grant of the

lands and ferry of Duncansby, c. 1600.

John'son City, city, E. Tennessee, U.S.A., 90 m. E. of Knoxville; tourist centre; foundries; produces leather and furniture. Pop. 25,000.

John'stone, tn., Renfrew, Scotland, 3 m. w. by s. of Paisley; cotton, flax, iron, machinery, shoe laces; collieries in vicinity. Pop. 12,800.

John'stown. (1) Tn., Pennsylvania, U.S.A., 55 m. E. of Pittsburgh; iron and steel manufactures. Pop. 67,000. (2) Tn., New York, U.S.A., 40 m. N.W. of Albany; manufactures gloves, clothing. Pop. 11,000.

Johore (*jó-hór*), or JOHOR, independent sultanate (under Brit. protection), s. extremity of Malay Pen., Asia; surface low-lying; forested; produces rubber, timber, coffee, sago, pepper; rly. (120 m.). Cap. Johore. Area, 7,678 sq. m.; pop. 330,500.

Jokjakarta, or JOKYAKARTA, residency, Java, Dutch E. Indies; sugar, tobacco. Cap. Jokjakarta (110,000), 260 m. E.S.E. of Batavia; large citadel. Pop. 1,400,000.

Jo'liet, city, Illinois, U.S.A., 30 m. S.W. of Chicago; iron and steel manufactures. Pop. 42,000.

Joliette, city, Quebec, Canada, 43 m. N. of Montreal; woollen, paper, and tobacco manufactures. Pop. 11,000.

Jönköping (*yon-cho'ping*), tn., Sweden, on s. end of L. Vetter; manufactures matches, carpets, paper, arms. Pop. 30,000.

Jop'lin, tn., Missouri, U.S.A., 140 m. S. of Kansas City; zinc and lead; smelting works. Pop. 33,000.

Jop'la. See JAFFA.

Jor'dan, riv., Palestine, rises on slopes of Mt. Hermon; flows through Sea of Galilee and rift valley into Dead Sea.

Juan de Fuca. See FUCA.

Juan Fernandez Islands (*huán fer-nán-dáth*), volcanic group (belonging to Chile), S. Pacific Ocean; largest is Mas-a-Tierra, where Alexander Selkirk, prototype of Robinson Crusoe, lived (1704-9); wireless station; c. 300 inhabitants.

Juba (*joo'ba* or *joo'bat*), or **JUB**, riv., E. Africa, rising in the highlands of Abyssinia, Africa; traverses Galla country and Italian Somaliland, reaching Indian Ocean near Kismayu; in lower reaches fringed by a narrow fertile belt. Length, c. 1,000 m.

Jubbulpore, or **JABALPUR**, (1) Most northerly div., Central Provs., India; generally hilly. Area, 18,950 sq. m.; pop. c. 2,000,000. (2) Dist. in above, largely in rich plain of Nerbada riv.; wheat, millet, oil-seeds. Area, 3,912 sq. m.; pop. 746,000. (3) Cap. of div.; cottons, carpets, pottery; oil and flour mills; military station; important rly. jn. Pop. 108,000.

Jude'a, term applied to s. Palestine in time of Christ.

Ju'dah, dist. of ancient Palestine, between Philistia and Dead Sea.

Jug'ernaant. See **PURI**.

Jugo-Slavia. See **YUGOSLAVIA**.

Jujuy (*hoo-hue'*), prov., N. Argentina, S. America; mountainous in E., with fertile valleys; dry plateau in W.; sugar-cane, cereals, fruit. Cap. Jujuy (8,000). Area, 14,802 sq. m.; pop. 90,000.

Jullundur, or **JALANDHAR**, tn., Punjab, India, 50 m. S.E. of Amritsar; flour mills, cotton and silk factories. Pop. 71,000.

Jumilla (*hoo-mé'lyd*), tn., E. Spain, 40 m. N. by W. of Murcia; coarse cloth and esparto fabrics. Pop. 20,500.

Jum'na, riv., N. India; rises in Himalayas; forms boundary between Punjab and United Provs.; crosses United Provs., and unites with Ganges below Allahabad. Chief cities on

banks: Delhi, Agra, Muttra, Allahabad. Length, 860 m.

Junagarh (*joo-ná-gur*), or **JUNAGAD**, tn., Kathiawar Peninsula, Bombay, India; ancient citadel. Pop. 33,500.

Juneau (*joo-né*), cap., Alaska, c. 320 m. N.W. of Prince Rupert; gold-mining and fishing centre; lumber products. Pop. 3,500.

Jung-Bunslau. See **MLADA BOLESLAV**.

Jungfrau (*yoong-frou*), mt., Bernese Oberland, Switzerland; alt. 13,669 ft.; name means the 'maiden'; first ascended in 1811; electric railway up to 11,340 ft.

Junin (*hoo-nén*), central dep., Peru, S. America; copper, silver, lead. Cap. Cerro de Pasco. Area, 22,814 sq. m.; pop. 450,000.

Ju'ma, (1) Mountainous isl., Inner Hebrides, Scotland; nearly bisected by Loch Tarbert; highest point, Paps of Jura, 2,571 ft.; sheep farming and agriculture; fishing; quarrying. Area, 143 sq. m.; pop. 500. (2) Mt. range, along borders of France and Switzerland; length over 150 m., breadth c. 40 m.; chiefly limestone; forms a high plateau rising in several parallel chains. (3) Dep., E. France; mainly mountainous; drained by R. Doubs; large forests; vines, cereals, cheese; rock salt and iron mines; clocks, watches, toys. Cap. Lons-le-Saunier. Area, 1,951 sq. m.; pop. 231,000.

Juticalpa (*hoo-té-gal'pa*), or **JUTICALPA**, tn., Honduras, Central America; centre of rich mining and agricultural district. Pop. 10,000.

Jut'land, pen., forming continental part of Denmark. See **DENMARK**.

K

K². See **GODWIN-AUSTEN**.

Kabar'din-Bal'kar, area between North Caucasian Area and Georgia, U.S.S.R.; Kabardin is plain and hilly; Balkar is mountainous, including loftiest part of Caucasus Mts. (Mt. Elbruz, 18,465 ft.); numerous streams;

main occupations are herding cattle and sheep, and agriculture (maize, sunflowers, potatoes, and vegetables). Chief tn., Nalchik. Area, c. 3,600 sq. m.; pop. 204,000.

Kab'ba, prov., N. Nigeria, W. Africa; valleys fertile and stretches of dense

forest; watered by Rs. Niger and Benue; cereals, rubber, tobacco, indigo, and cotton. Chief tns., Zungeru (cap.) and Lokoja. Area, 10,382 sq. m.; pop. 411,000.

Kabin'da. (1) Part of Belgian Congo, w. Africa, n. of mouth of R. Congo; very fertile; has flourishing plantations and orange groves. Area, c. 3,000 sq. m. (2) Cap. of above, on the coast; formerly a famous slave mart. Pop. c. 10,000.

Kabul (*kā'bool*). (1) Riv., Afghanistan; source in Hindu Kush; joins Indus; length, 300 m. (2) Cap., Afghanistan, on Kabul R.; 6,900 ft. above sea-level; an anc. town commanding passes n. and w.; on trade route between Central Asia and Punjab; large transit trade in carpets, shawls, soap, silk, and cotton. Pop. c. 100,000.

Kach'hi, level dist., Baluchistan, between Brit. Baluchistan and native state; fertile where irrigated; leather and pottery. Area, 5,300 sq. m.; pop. 75,000.

Kachin' Hills, hill region, n. Burma; crossed by several mountain chains; watered by Irrawaddy; inhabited by lawless native tribes. Area, c. 19,180 sq. m.; pop. 64,000.

Kadur, dist., Mysore, India; mostly hilly; well forested; rice and coffee. Chief tn., Chikmagalur, 80 m. n.w. of Mysore. Area, 2,788 sq. m.; pop. 334,000.

Kaf'la, dist. in s.w. of Abyssinia, Africa; mountainous and thickly wooded; coffee grown on mt. slopes. Area, c. 5,000 sq. m.

Kaffra'ria ('land of the Kaffirs'), former name for Transkeian Territories, S. Africa; name sometimes restricted to dist. between Great Fish and Great Kei Rs.; annexed to Cape Colony in 1865 as Brit. Kaffraria.

Kafiristan', dist., n.e. Afghanistan, on s. slope of Hindu Kush; mountainous; watered by tribs. of Rs. Indus and Kabul; many great forests. The inhabitants, pastoral tribes, are backward in civilization. The country commands the passes of

the Hindu Kush. Area, c. 5,000 sq. m.; pop. c. 175,000.

Kag'ra, riv., E. Africa, headwater of Nile; enters Lake Victoria; lower reaches navigable for shallow draught steamers; length, about 430 m.

Kagoshima (*kā-go-shē ma*), tn., s. Kyushu, Japan, on Kagoshima Gulf; arms, cotton, pottery, glass, cigarettes. Pop. 125,000.

Kaletur Fall (*kā'ē-toor*), waterfall, Potaro riv., Brit. Guiana, S. America; alt. of great fall, 741 ft.; of small falls, 81 ft.

Kai-feng (*kā-feng*), walled tn., cap. of Honan, China, near Hwang-Ho R., from floods of which it has often suffered; centre of important agricultural area; cotton factories. Pop. 200,000.

Kaira (*kā'ra*), dist., Bombay, India, n. of Gulf of Cambay; largely plain; chief crops, cotton, millet, rice, pulse; bauxite mined; exports ghee (clarified butter). Chief tn., Kaira. Area, 1,608 sq. m.; pop. 711,000.

Kairwan. See QAIHWA.

Kaiseng (*kā'seng*), or SONG-DO, tn., Korea, 35 m. n.w. of Seoul; was cap. from 910 to 1232; ginseng and oiled paper. Pop. 60,000.

Kaiserslautern (*kā'sers-lou'tern*), tn., Bavaria, Germany, on R. Waldauter, 42 m. w. of Mannheim; manufactures iron goods, cotton, woollens, beer, tobacco, sugar. Pop. 59,000.

Kaiser Wilhelm's Land. See NEW GUINEA.

Kaithal (*kā-tūl*), tn., Punjab, India, 50 m. s.w. by s. of Ambala; saltpetre, lac ornaments, toys. Pop. 16,000.

Kalahar'i Desert, vast steppe region in Bechuanaland and S.W. Africa; elevation of 3,000 to 4,000 ft.; almost waterless; inhabited by agricultural race and by nomadic Bushmen or hunters; many parts covered with vegetation; cattle raised in e. portion and crops grown; big game abundant. Area, 120,000 sq. m.; pop. c. 50,000.

Kalamata's, seapt., s. Greece; important fig centre; exports silk,

olive oil, currants, and fruit. Pop. 29,000.

Kalamazoo', tn., s. Michigan, U.S.A.; railway centre; machinery, paper; much celery and fruit (esp. grapes). Pop. 54,000.

Kalat', (1) State, Baluchistan; mountainous, with fertile valleys; salt. Area, 73,278 sq. m.; pop. 328,000. (2) Cap. of above; khan's palace. Pop. 15,000.

Kal'be, tn., Saxony, Prussia, on R. Saale, 17 m. s. of Magdeburg; rly. jn.; manufactures textiles, paper, and sugar. Pop. 11,000.

Kalgan', fort, tn., Hopeh, China, 100 m. n.w. of Peking; extensive transit trade; centre for wool, furs, skins, and tea. Pop. 76,500.

Kalgor'lie, tn., W. Australia, 340 m. e.n.e. of Perth; goldfields; water supply pumped from Perth; now linked by rly. with Port Augusta, S. Australia. Pop. 5,300.

Kalimpong, tn., Bengal, India, in Darjeeling dist.; health station (alt. 3,933 ft.) with Church of Scotland Homes for poor European and Eurasian children (1900); mkt. tn. for Tibetan wool and mules; agricultural fairs.

Kalisz (*ká'lish*). (1) Prov., Poland; flat and sandy; many lakes and marshes; cereals, cattle-raising. Area, 4,377 sq. m.; pop. 1,342,409. (2) Cap. of above, 50 m. w. of Lodz; brewing and tanning; ribbons, sugar. Pop. 45,000.

Kal'mar, port and cathedral tn., Sweden, opposite Öland I.; ship-building and timber products. Pop. 19,000.

Kal'muck, Autonomous Area, Russia, n.w. of Caspian Sea and s. of R. Volga; a plain, most of which is below sea-level; not well watered; stock raising; inhabited by Mongols. Chief tn., Astrakhan. Area, 27,850 sq. m.; pop. 153,000.

Kalocsa (*kol'och-á*), tn., Hungary, near l. bk. of R. Danube; fine cathedral, archbishop's palace, and observatory; wine, fruit, flax, cereals. Pop. 12,000.

Kaluga (*ká-loo'gá*). (1) Prov., central Russia, bounded by Moscow on n. Iron and coal mined; rye, oats, potatoes, flax, cucumbers, and vegetables are cultivated. Area, 10,282 sq. m.; pop. 1,152,000. (2) Cap. of above, on R. Oka; leather goods, beer, bricks, and sausages. Pop. 52,000.

Kamchat'ka, peninsula, e. Siberia, e. of Sea of Okhotsk; traversed by mountain range with volcanic peaks; drained by Kamchatka and other streams; severe climate; thermal springs; valuable furs; minerals in mountains; abundant fish; salmon canneries; reindeer bred. Area, c. 104,280 sq. m.; pop. c. 20,000.

Kam'enets Podolskiy', or **PODOLIAN KAMENETS**, tn., Ukraine, U.S.S.R., 250 m. n.w. of Odessa; tobacco and brewing. Pop. 30,000.

Kamenz (*ká'ments*), tn., Saxony, Germany, on R. Schwarz Elster, 21 m. n.e. of Dresden; leather, glass, stone-ware. Pop. 11,000.

Kamerun. See CAMEROONS.

Kam'et, MOUNT, Himalayan peak, United Provs., India, 210 m. n.e. of Delhi; first climbed by Brit. party under Frank Smythe, June 21, 1931; highest summit yet attained by man. Alt. 25,447 ft.

Kam'loops, tn., British Columbia, Canada, on Thompson R., 150 m. n.e. of Vancouver; brewing and fruit preserving; cigars, bricks. Pop. 4,500.

Kam'pen, tn., Overijssel, Holland, near mouth of R. IJssel; cigars; trade in hay and dairy produce. Pop. 20,000.

Kampot, tn., s.w. Cambodia, Asia, on Gulf of Siam; principal seaport. Pop. 3,000.

Kamp'ti, tn., Central Provs., India, 9 m. n.e. of Nagpur; cotton. Pop. 50,000.

Kamrup', dist., Assam, India, on both sides of R. Brahmaputra; rice is the chief crop. Chief tn., Gauhati. Area, 3,863 sq. m.; pop. 762,000.

Kamyshin', tn., Saratov, Russia, on R. Volga; exports cereals and salt; timber and flour mills. Pop. 18,000.

Kan'sra. (1) NORTH, strip of country between W. Ghats and Arabian Sea, Bombay, India; hills well wooded; rice, coconuts, cardamoms, pepper, teak. Area, 3,946 sq. m.; pop. 402,000. (2) SOUTH, terr., Madras, s. of above; rice, coconuts, coffee, areca nuts, spices; manufactures tiles. Area, 4,021 sq. m.; pop. 1,247,000.

Kanazawa (*kā-nā-zā-wā*), tn., Honshu, Japan, on w. coast, 125 m. N.E. of Kyoto; porcelain, silks, inlaid bronzes. Pop. 147,500.

Kanchenjunga's, highest peak in Nepal Himalayas, N. India; over 28,000 ft.

Kandahar', tn., Afghanistan, commanding entrance of Bolan Pass. On main route between India and Persia, trades largely with Herat, Samarkand, Bukhara, and Bombay; silks and felts produced; exports wool, fruit, vegetables, provisions; encircled by walls; on high rock to N. is strong fortress. Pop. 60,000.

Kan'dy, old cap., Ceylon, near centre of isl.; picturesque; native temples (one containing Buddha's tooth); tea, cocoa, pepper. Pop. 33,000.

Kan'gra. (1) Dist., Punjab, India; tea, rice, honey, spices. Chief tn., Dharmasala, 100 m. N.E. of Amritsar. Area, 9,978 sq. m.; pop. 766,000. (2) Tn. in above, former cap.; destroyed by earthquake (1905). Pop. 5,000.

Kankakee', tn., Illinois, U.S.A., on Kankakee R., 56 m. S. of Chicago; agricultural implements, furniture, machinery, incubators. Pop. 17,000.

Kannstatt', tn., Württemberg, Germany, on R. Neckar, 2½ m. from Stuttgart; mineral springs; chemicals, motor-cars, and machinery. Pop. 21,000.

Kano (*kā'no*). (1) Prov., N. Nigeria, Africa; mainly well-cultivated plain. Area, c. 20,000 sq. m.; pop. 2,300,000. (2) Cap. of above; walled; great trading centre; manufactures cotton, Hausa gowns, embroidered goods, and leather articles. Pop. 50,000.

Kan'sas, a central state of U.S.A.; bounded N. by Nebraska, E. by Missouri, S. by Oklahoma, W. by Colorado. Surface generally consists of undulating prairie, rising from 800 ft. in S.E. to 4,000 ft. in N.W.; drained by R. Kansas and Arkansas and their tribs. Climate is healthy, although subject to occasional extremes of both heat and cold. Kansas is pre-eminently agricultural (irrigation required in W.), and produces large crops of maize, wheat, oats, alfalfa, potatoes, barley, flax. Live-stock is largely raised; dairy farming flourishes in W. Minerals include vast quantities of coal; oil, petroleum, natural gas, zinc, limestone, lead, salt, gypsum also found. Industries include meat packing, flour milling, dairying. Chief tns., Kansas City, Topeka (cap.), and Wichita. Area, 82,158 sq. m.; pop. 1,852,000.

Kan'sas City. (1) Tn., Missouri, U.S.A., on R. bk. of Missouri R., adjoining Kansas City, Kansas; important railway and trading centre; has grain elevators, stockyards, meat-packing houses; butter substitutes, butter, eggs, lumber, grain; important annual live-stock show. Pop. 399,000. (2) Tn., Kansas, U.S.A., on R. Missouri; practically part of above; meat-packing and live-stock trade; flour milling; locomotives; soap. Pop. 122,000.

Kansk, tn., Siberian Area, U.S.S.R., on Trans-Siberian Rly., 130 m. E. of Krasnovarsk; near iron, gold, and coal fields; leather working and distilling. Pop. 19,000.

Kansu', prov., China, drained by Hwang-Ho; mountainous parts well timbered; in E., loess regions produce poppy; cereals, fruits; gold, mercury, petroleum, and coal are found. Cap. Lanchow. Area, 125,450 sq. m.; pop. 5,928,000.

Kantara, NOW QANTARA. See SUEZ CANAL.

Kapur'thala, Indian state, Punjab, India, 35 m. S.E. of Amritsar; cotton, sugar, wheat, tobacco. Area, 630 sq. m.; pop. 284,000.

Kara, dist., Far E. Area, U.S.S.R., 300 m. E. of Chita; gold mines.

Karachi (*karā'chi*), port, Sind, India, N.W. of Indus delta; outlet for N.W. India; rly. terminus; excellent harbour; nearest Indian port to Europe; air port; exports wheat, hides, tallow, wool. Pop. 217,000.

Kara-Hissar' **Sharki**, or **SHABIN KARA-HISSAR**, tn., Asia Minor, 85 m. S.W. of Trebizond; alum mines. Pop. 18,000.

Kara-Kalpak', an area, part of Kazak Rep., U.S.S.R., lying S.E. of Sea of Aral along N. bk. of R. Oxus; largely desert; fertile soils along Oxus; producing figs, melons, fruits, and some wheat, maize, cotton. Area, 45,200 sq. m.; pop. 303,000.

Karakoram Mts., or **MUSTAGH RANGE**, range of mts. 450 m. long, in Central Asia, N. of Kashmir, between Hindu Kush and Kunlun mts.; great glaciers; highest peak, Mt. Godwin-Austen.

Kara-kul', GREAT, salt lake, Fergana, Central Asia, on Pamir plateau; c. 13,000 ft. above sea-level; 12 m. by 10 m.; no outlet, and was formerly much larger.

Kara-kum'. See **QARA QUM**.

Kara Sea (*karā'*), branch of Arctic Ocean; 170 m. by 300 m.; between Novaya Zemlya and N.W. Siberia; navigation open from July to Sept.

Karasu-Bazar (*ka-rā'soo-ba-zār'*), tn., Crimea, Russia; manufactures morocco leather goods, embroidery; exports fruit. Pop. 13,000.

Karategin (*kā-rā-tā-gēn'*), former khanate of Bukhara, now included in Tajik Rep., U.S.S.R.; good pasture. Area, 8,000 sq. m. Pop. c. 300,000.

Karauli (*kā-rāu'li*), Indian state, Rajputana, India; hilly, richly timbered; agriculture, cattle raising; iron ore. Chief tn., Karauli, 70 m. S.E. of Jaipur. Area, 1,242 sq. m.; pop. 134,000.

Karbala (*kar-bā'la*), tn., Iraq, 60 m. S.S.W. of Baghdad; a holy city and a centre of pilgrimage; exports cereals, dates, and hides. Pop. 55,000.

Karelia, rep., Russia, between

Finland and White Sea; contains Lake Onega and many other lakes and marshes; stretches of forest; little agriculture; timber industries. Chief tn., Petrozavodsk, on W. shore of L. Onega. Area, 53,890 sq. m.; pop. 267,000.

Karen'ni, region between Siam and Lower Burma; drained by Salween R.; consisting of number of small native states under Brit. control; inhabited by Red Karens and other tribes; produces teak, rice, lac, hides, areca nuts. Area, 4,280 sq. m.; pop. 63,000.

Karikāl'. (1) Fr. possession, Coromandel coast, India; very fertile; irrigated by branches of Cauvery R. Area, 53 sq. m.; pop. 58,000. (2) Cap. of above; exports rice, pottery, and ground-nuts. Pop. 17,000.

Karlovae (*kar'lo-vats*), tn., Croatia-Slavonia, Yugoslavia, 30 m. S.W. of Zagreb; chemicals, woollens, leather. Pop. 17,000.

Karlovič Sremaki (*kar'loo-tsi*), formerly KARLOWITZ, tn. and archbishop. see, Croatia-Slavonia, Yugoslavia, N.W. of Belgrade, near R. Danube; wine and plum brandy. Pop. 5,700.

Karlsbad. See **CARLSBAD**.

Karlsburg. See **ALBA-JULIA**.

Karlskro'na, or **CARLSKRONA**, port, S. Sweden; headquarters of Swedish fleet; felt hats, leather, canvas; exports timber, fish, dairy produce. Pop. 27,000.

Karlsruhe (*karls-roo'e*), cap. of Baden, Germany, 30 m. S. of Heidelberg; palace, picture gallery, and academy of art; railway stock, machinery, hardware, surgical instruments, chemicals, carpets, beer, perfumes, tobacco. Pop. 146,000.

Karl'sted, tn., Sweden, on isl. N. end of L. Vener; timber trade; matches, machinery, tobacco; agreement dissolving union of Norway and Sweden signed here (1905). Pop. 20,000.

Karnak', vil., Egypt, on R. Nile, where anc. Thebes stood; site of great temple and other ruins.

Kar'nal. (1) Dist., Punjab, India,

N. of Delhi; alluvial plain producing cotton, sugar, cereals. Area, 3,125 sq. m.; pop. 829,000. (2) Cap. of above; manufactures cotton, blankets, boots. Pop. 23,000.

Karoo. See under CAPE OF GOOD HOPE.

Kars. (1) Vilayet, Turkey-in-Asia, in extreme N.E.; elevated plateau crossed by mts.; thickly wooded; extreme climate; agriculture and cattle rearing; extensive deposits of salt. Area, 7,238 sq. m.; pop. 205,000. (2) Fortress and cathedral tn., cap. of above, 110 m. S.E. of Batum; coarse woollens, carpets, felt. Pop. 24,000.

Karun (*kā-roon'*), river, Persia, rises in Bakhtiari Mts., flows W. and S., and joins the Shatt-al-Arab below Basra. Length, c. 470 m.

Kasai, riv., Africa; source in Portuguese W. Africa, which it separates from Belgian Congo; then flowing N.W. unites with Kwango and joins Congo near Ngato. Length, c. 900 m.

Kashan, tn., Persia, 95 m. N. of Isfahan; manufactures silk, copper vessels; rose-water exported. Pop. over 15,000.

Kashgar, tn., W. Sinkiang, China, on trade route between India, China, and Russia; manufactures leather goods, pottery, felt, textiles; oil refining. Pop. (est.) 80,000.

Kashmir, Indian state, N.W. India. Surface consists of mountains and rich valleys, the latter 3,000 ft. above sea-level; includes basin of Upper Indus, and is crossed by R. Jhelum (which widens into several lakes) and its tribs. Agricultural and pastoral; extensive forests; woollen cloth, shawls, silver work, and wood carving. Fine climate; health resort. Cap. Srinagar. Area, 84,258 sq. m.; pop. 3,331,000.

Kasi. See BENARES.

Kasimov (*ka-sē'mov*), tn., central Russia, on R. Oka; leather goods, ropes, linen; annual fair. Pop. 13,000.

Kassa. See KOSICE.

Kassal's, fort. tn., Anglo-Egyptian

Sudan, E. of Khartum; trading centre for ivory, gold dust, hides. Pop. 20,000.

Kassel. See CASSEL.

Kastamu'ni, or KASTAMO'NU. (1) Vilayet, N. Asia Minor; cereals, fruits, cotton, mohair, and tobacco; much mineral wealth and timber. Area, 19,570 sq. m.; pop. 336,000. (2) Cap. of above; manufactures copper ware. Pop. 63,000.

Kasto'ria, tn., Greece, N.W. Macedonia; trade in grain; remains of Byzantine walls. Pop. 10,000.

Kasur, tn., Punjab, India, 34 m. S.E. of Lahore; grain, cotton, leather. Pop. 31,000.

Katan'ga, prov., Belgian Congo, N. of Rhodesia; rich in copper and radium; other minerals are coal, tin, iron, diamonds, gold; cattle raising; connected by rail with Cape Town and Lobito Bay on W. coast, and Beira on E. coast. Area, 180,000 sq. m.; pop. c. 1,000,000.

Katha, region, Upper Burma, drained by R. Irrawaddy; hilly forested; rubies and other gems; rice, tea, cotton. Chief tn., Katha. Area, 8,917 sq. m.; pop. 254,000.

Kathiawar, peninsula, W. coast, India, between Gulf of Cambay and Gulf of Cutch; produces cotton. Area, 20,882 sq. m.; pop. 2,542,000.

Katmandu, cap. of Nepal, India, on Bagmati R.; numerous temples. Pop. 90,000.

Katowice (*kā-to-vit'se*), tn., Poland, 45 m. W.N.W. of Cracow; ironworks, machinery; zinc and coal in vicinity. Pop. 105,000.

Katrine (*kat'rin*), LOCH, Stirling-shire and Perthshire, Scotland; 8 m. long; scene of Scott's *Lady of the Lake*; supplies Glasgow with water.

Kat'tegat, sound between Sweden and Denmark. Length, 150 m.; breadth, from 40 to 70 m.

Kattowitz. See KATOWICE.

Kauai. See HAWAIIAN ISLANDS.

Kaunas (*kou'nas*), formerly KOVNO, present cap. of Lithuania, on R. Niemen; bone meal, metal goods, soap, and candles. Pop. 96,000.

Kavalla, port, Greece, on Kavalla Bay, Macedonia; exports tobacco. Pop. 50,000.

Kaveri. See **CAUVERY**.

Kawardha, Indian state, Central Provinces, India; chiefly well-forested hills with fertile areas producing wheat, rice, cotton. Cap. Kawardha, 110 m. S.E. of Jubbulpore. Area, 798 sq. m.; pop. 62,000.

Kayes (*kās*), tn., French Sudan, Africa, at head of navigation of R. Senegal; fortified; on rly. and air route from Dakar. Pop. 11,500.

Kazak, rep., R.S.F.S.R., bordered by Ural Area, Siberian Area, China, Turkmen Rep., Caspian Sea, and European Russia. Most of it is 'steppe' country, with numbers of salt lakes. Live-stock rearing and agriculture are chief occupations. Area, 1,169,975 sq. m. Pop. 6,531,000. Chief tns., Kzyl-orda (cap.), Semipalatinsk, Alma-Ata, Petropavlovsk, and Uralsk.

Kazan, cap. of Tatar Republic, Russia, near R. Volga, c. 200 m. E. of Nijni-Novgorod; has fortress containing governor's castle, arsenal, monastery, cathedral; univ.; soap, candles, felt boots, morocco leather, tobacco, textiles; brewing. Pop. 180,000.

Kasruin, tn., Persia, 50 m. W. of Shiraz; has famous garden with orange groves. Dist. produces rice, cotton, opium. Pop. c. 7,000.

Kasvin (*kaz-vén*), tn., Persia, 90 m. N.W. of Tehran; produces grain, silks, fruit; important transit trade. Pop. 50,000.

Kearny (*kār'ne*), tn., New Jersey, U.S.A., opposite Newark; thread, linoleum, celluloid, photographic material; railway shops and slaughter houses. Pop. 47,000.

Kearsley, urb. dist., Lancs, England, 4 m. S.E. of Bolton; coal, cotton; bleaching and dyeing. Pop. 9,700.

Keskenet (*kek'hem-It*), tn., Hungary, 65 m. S.E. of Budapest; fruit preserving; flour milling; tanning; wine, apples, apricots, and tobacco. Pop. 79,000.

Kedah, state, W. coast of Malay Peninsula, under Brit. protection; drained by R. Kedah; rice, rubber, tapioca, coconuts. Cap. Alor Star. Area, 3,648 sq. m.; pop. 339,000.

Kediri (*kā-dē're*), residency, E. Java, Dutch E. Indies; much of it mountainous; rice, cassava, sugar, tapioca, teak. Area, 2,847 sq. m.; pop. 2,154,000.

Kedu, residency, central Java, Dutch E. Indies; mountainous, with fertile valley of R. Praga; rice, sugar-cane, tobacco, coconuts, groundnuts; rubber, timber. Area, 2,197 sq. m.; pop. 2,448,000.

Keeling Islands. See **Cocos ISLANDS**.

Keene, tn., New Hampshire, U.S.A., 40 m. S.W. of Concord; manufactures furniture, boots; large trade in lumber and maple sugar; winter sports resort. Pop. 11,000.

Keewat'in, provisional dist., N.W. Terr., Canada, between Hudson Bay and 102° W.; in 'Barren Land' region; abounds in game. Area, 228,000 sq. m.

Keg'worth, tn., Leicestershire, England, 5½ m. N.W. of Loughborough; hosiery and embroidery. Pop. 2,100.

Keighley (*kēth'lē*), tn., W. Riding, Yorks, England, 9 m. N.W. of Bradford; manufactures woollen stuffs, machinery, and tools; ironfounding. Pop. 40,400.

Kei Islands (*kā'ī*), group in Molucca Islands, Dutch E. Indies; all thickly wooded; maize, yams, rice, plantains cultivated; fishing. Area, 572 sq. m.; pop. 36,000.

Keith, tn., Banffshire, Scotland, on R. Isla; distilleries, flour mills, blankets, and agricultural implements; horse and cattle fairs. Pop. 4,400.

Kelantan, state, E. coast of Malay Peninsula, under Brit. protection; drained by R. Kelantan; rice, coconuts, rubber, live-stock. Cap. Kota Bharu. Area, 5,713 sq. m.; pop. 309,000.

Kells, mkt. tn., co. Meath, I.F.S., 38 m. N.W. of Dublin; illuminated

Book of Kells was prepared here in 10th cent. Pop. 2,200.

Kel'so, mkt. tn., Roxburghshire, Scotland, on R. Tweed; ruins of abbey; coach building; manufactures agricultural machinery and fishing tackle. Pop. 3,900.

Kempston, urb. dist., Beds, England, adjoining Bedford. Pop. 5,400.

Kempten, tn., s.w. Bavaria, Germany, on R. Iller; textiles, paper, matches, machinery; cement; brewing. Pop. 22,000.

Ken'dal, tn., Westmorland, England, on R. Kent; woollens, hosiery, boots and shoes, gunpowder. Pop. 15,600.

Keneh, or **KENA**. See **OENA**.

Keng-tung. See **TUNG KENG**.

Ken'Ilworth, mkt. tn., Warwickshire, England, 4 m. N. of Warwick; famous ruined castle; tanning. Pop. 7,600.

Ken'more, par. and vil., Perthshire, Scotland, on L. Tay; popular tourist resort. Pop. (par.) 1,000.

Ken'nington, suburb of London, Surrey, England, 2 m. s.s.w. of St. Paul's. Kennington Oval, s. of Vauxhall Bridge, is ground of Surrey Cricket Club. Pop. 72,700.

Keno'ra, tn., Ontario, Canada, on L. of the Woods; lumbering, flour milling, fishing; gold mining in vicinity. Pop. 6,000.

Keno'sha, tn., Wisconsin, U.S.A., on Lake Michigan; good harbour; motor-cars, hosiery, bedsteads. Pop. 50,000.

Ken'sington, bor. of London, contains Kensington Gardens and Palace, Natural History and South Kensington Museums, and Brompton Oratory. Pop. 180,700.

Kent, co. in s.e. extremity of England, between Thames estuary and Eng. Channel; surface undulating in interior, rising in the Downs to over 800 ft.; drained by Rs. Thames, Medway, Stour, Darent; in s.e. is marshy district, and in s. is region known as the Weald; n.w. corner is practically a suburb of London, with Woolwich Arsenal and government dockyards of Sheerness and Chatham.

(3,601)

Kent is called the 'garden of England'; large tracts of woodland, with oaks and other valuable trees. Agriculture is chief industry; cereals, hops, fruits, vegetables; sheep and cattle; dairying and market gardening; coal mined. At Whitstable and Faversham are oyster beds. Manufactures include gunpowder, bricks, cement, paper, shipbuilding; fishing round coasts. Most important tns. are Gillingham, Chatham, Maidstone (co. tn.), Tunbridge Wells, Folkestone, Dover, Margate, Ramsgate, Canterbury. Area, 1,525 sq. m.; pop. 1,218,600.

Kentuck'y, S. Central State, U.S.A., bounded n. by Illinois, Indiana, and Ohio; e. by W. Virginia and Virginia; s. by Tennessee; w. by Missouri. Surface undulating, rising to about 3,000 ft. in Alleghany plateau. In s.w. are great cypress swamps. Principal rivs. are Ohio, which forms n. boundary, and its tribs.; R. Mississippi forms part of w. boundary. There are some remarkable caves. Climate is temperate. Kentucky is largely agricultural, esp. Blue Grass country; produces more tobacco and hemp than any other dist. of U.S.A.; also maize, wheat, and fruit. Especially famous for horses; mules, cattle, sheep, pigs also raised. There are large forests containing valuable timber. Extensive coalfields in both e. and w., also iron, lead, salt, fluorspar, sandstone, natural gas, petroleum. Among principal industries are lumbering, flour milling, tanning, manufacture of cotton-seed oil, hardware, clothing, cigars. Chief tns. are Frankfort (cap.), Louisville, Covington, Lexington, Newport. Area, 40,598 sq. m.; pop. 2,553,000.

Ke'nya, Mt., volcanic peak, Kenya Colony, Africa; was first climbed by H. J. Mackinder (1899); lower slopes are forested. Height, 17,040 ft.

Ke'nya Colony and Protectorate, formerly **BRITISH EAST AFRICA**, country in e. Africa, bounded by Abyssinia (n.), Uganda Protectorate (w.), Tanganyika Terr. (s.), Indian

Ocean and Italian Somaliland (E.); seaboard c. 400 m. Protectorate consists of coastal strip rented from Sultan of Zanzibar. Coast regions are flat and unhealthy; high parts of interior fit for white occupation; traversed by volcanic mt. ranges; highest peak, Mt. Kenya; chief rivs., Tana and Sabaki; part of L. Rudolf in N.W. and of L. Victoria in W. In interior are valuable forests and fine pasture lands; S. and N.E. dists. are fertile. Chief products of highlands are coffee, maize, wheat, sisal; of wet lowlands, rice, coconuts, cotton, cassava, sugar, ground-nuts; dairying and wool industries in highlands. Mineral resources are not yet exploited. Rly. from Mombasa to L. Victoria and through Uganda to R. Nile. Cap. Nairobi; chief port, Mombasa. Area, 224,960 sq. m.; pop. 2,892,000 (including 12,500 Europeans).

Ke'okuk, city, S.E. Iowa, U.S.A., on Mississippi R., receiving water-power from Des Moines rapids; centre of rich agricultural area; butter; manufacture of starch, glucose, and patent medicines. Pop. 14,000.

Kerbela. See KARBALA.

Kerch, port, Crimea, Russia; is situated on Strait of Kerch, connecting Black Sea and Sea of Azov, and is strongly fortified; wheat, linseed, wool, hides, and caviar; sturgeon fishing. Pop. 34,000.

Kerguelen Land (*ker'ge-len*), or DESOLATION ISLAND, a mountainous uninhabited isl. in extreme S. of Indian Ocean. The Kerguelen cabbage is much valued by sailors as a preventive of scurvy. Annexed by France (1893). Area, c. 1,400 sq. m.

Kerkraide (*ker'ra-dā*), tn., Limburg, Holland, on German frontier; coal-mining centre. Pop. 35,000.

Kerkuk. See KIRKUK.

Kermadec Islands, volcanic group, Pacific Ocean, 600 m. N.E. of Auckland, New Zealand; luxuriant vegetation; attempts at settlement have failed; group annexed to New Zealand (1887). Area, 8,208 ac.

Kerman. (1) Prov., S. Persia, with

Baluchistan on E. and Gulf of Oman on S. Country mostly desert, with fertile uplands and valleys; cotton, gums, dates, wools, carpets, and shawls. Area, c. 60,000 sq. m.; pop. c. 700,000. (2) Tn., cap. of above; carpets and felts; brass work. Pop. 40,000.

Kermanshab', cap. of prov. of same name, Persia, on route between Tehran and Baghdad; considerable trade in silk yarns, opium, gum, raw hides, carpets. Prov. produces wheat, maize, rice, fruits. Pop. (prov.) c. 400,000; (tn.) 40,000.

Ker'ry, W. mar. co., Munster, I.F.S., bounded N. by R. Shannon, E. by Limerick and Cork, S. by Cork, W. by Atlantic; coast deeply indented; surface, generally mountainous, is crossed by Macgillicuddy's Reeks, rising to 3,414 ft. in Carruntuohill, highest peak in Ireland. Rivs. are unimportant. Kerry contains the celebrated Lakes of Killarney. Mineral springs occur in various parts. Potatoes, oats, slate; well-known strain of cattle; dairy farming and coast fishing. Co. tn., Tralee. Area, 1,815 sq. m.; pop. 149,200.

Kes'ringland, par. and vil., Suffolk, England, 4½ m. S. of Lowestoft; wat.-pl.; fishing. Pop. (par.) 2,500.

Keste'ven, PARTS OF. See LINCOLN-SHIRE.

Keswick (*kez'ik*), mkt. tn., Cumberland, England, near L. Derwentwater; tourist centre; lead pencils. Pop. 4,600.

Ketch'ikan, tn., S.W. Alaska, N. America; important halibut and salmon fisheries; timber; fox farming. Pop. 2,500.

Ket'ley, vil., Salop, England, 13 m. E. of Shrewsbury; coal mines; iron-works. Pop. 2,200.

Ket'tering, mkt. tn., Northants, England; boots, shoes, brushes; leather dressing and ironfoundry. Pop. 31,200.

Kew (*kū*), suburban dist. of London, included in Richmond bor., Surrey, England; famous for the Royal Botanic Garden. Pop. 4,400.

Kewanee (*ke-wā'nē*), tn., Illinois, U.S.A., 130 m. w.s.w. of Chicago; agricultural implements; coal mining in vicinity. Pop. 16,000.

Keynsham (*kā'n'shām*), mkt. tn., Somerset, England, on R. Avon, 5 m. s.e. of Bristol; remains of abbey founded 1172. Pop. 3,850.

Key West ('bone reef'), city and port, Florida, U.S.A.; situated on Florida Keys; important U.S. naval station; connected with mainland by rly.; popular winter and health resort; exports cigars, sponges, turtles, fruit, and salt. Pop. 13,700.

Khabarovsk, tn., Far Eastern Area, U.S.S.R., on R. Amur; chief centre of sable trade; tanning, fur dressing, brewing, distilling. Pop. 44,000.

Khaibar Pass. See KHYBER PASS.

Khairagarh (*kā'r-a-gur*), Indian state, Central Provinces, India; soil extremely fertile; wheat and rice grown; large forest area with teak and bamboo. Chief tn., Khairagarh, 125 m. n.e. of Nagpur. Area, 930 sq. m.; pop. 124,000.

Khairpur (*kā'r-poor*). (1) State, Sind, Bombay, India; rich, fertile plain round Indus, otherwise sterile sandhill ridges; wheat, pulses, and cotton are grown. Area, 6,050 sq. m.; pop. 193,000. (2) Cap. of above, 150 m. n. of Hyderabad; weaving and dyeing; firearms, swords, and carpets. Pop. 16,000.

Khamga'on, tn., Berar, India, 25 m. w. of Akola; cotton factories and cotton market. Pop. 20,000.

Khandesh, dist., Bombay, India; surface generally flat; rugged and thickly wooded in s.w.; drained by R. Tapti; cotton extensively grown; oil-seeds and indigo exported. Area, 10,952 sq. m.; pop. 1,718,000.

Khandwa, tn., Central Provinces, India, 70 m. s.e. of Johore; exports raw cotton; oil-pressing. Pop. 27,000.

Khania. See CANEA.

Khar'ga, great oasis, Libyan Desert, Egypt; palm groves; cereals and lucerne; mat and basket making. Area, c. 1,800 sq. m.; pop. c. 10,000.

Kharkov. (1) Dist., Ukraine, U.S.S.R.; low tableland; drained by Rs. Dnieper, Don, Donetz; in 'black earth' zone; agriculture is principal occupation; beetroot, tobacco, flax, hemp, silk; chief minerals are iron, coal, salt, chalk. Area, 21,040 sq. m.; pop. 3,432,000. (2) Cap. of above; important railway centre; four annual fairs; woollens, sugar, iron goods, agricultural implements; chemicals. Pop. 417,000.

Kharput, tn., Turkey, Asia, on R. E. Euphrates; contains American Protestant college; Jacobite convent with a collection of rare manuscripts. Pop. 81,000.

Khartoum (*har-toom*), cap., Anglo-Egyptian Sudan, Africa; near in. of Blue and White Niles; connected by rail with Upper Egypt and Port Suakin on Red Sea. For nearly a century emporium for ivory and gum of Sudan and great slave market; Gordon besieged and killed here (1885); retaken by Kitchener (1898); contains Gordon Memorial Coll. Pop. (including suburbs) 45,000.

Khasi and Jaintia Hills, dist., Assam, India; elevated plateau 4,000 to 6,000 ft. high; well timbered; oranges, betel nuts, pineapples, potatoes. Area, 6,022 sq. m.; pop. 243,000.

Khasko'vo, or HASKOVO (Turkish *Khaskoi*), tn., s. Bulgaria; carpets, woollen goods, silk, and tobacco. Pop. 26,000.

Kheri (*ke-rē*). (1) Dist., United Provinces, India; sugar-cane, wheat, rice; important cattle-breeding centre. Area, 2,976 sq. m.; pop. 913,000. (2) Tn. in above, 75 m. n. of Lucknow.

Kherson. (1) Dist., Ukraine, U.S.S.R.; surface flat; drained by Rs. Dnieper, Dniester, Bug; agriculture and cattle raising. Area, 27,337 sq. m.; pop. 3,807,000. (2) Port, cap. of above, on R. Dnieper; flour, beer, machinery; trade in timber, wool, cereals, hides. Pop. 59,000.

Khingian Mountains, two ranges in E. Asia. (1) GREAT KHINGAN; important orographical, climatic, and economic boundary; separates Mon-

golian plateau from Manchuria; rises to 8,000 ft. (2) **LITTLE KHINGAN**, E. of above; crossed by Amur R.

Khiva (*kē'wa*), cap. of former state of Khiva, now absorbed in Uzbek Rep., U.S.S.R., Asia, 25 m. W. of R. Oxus; has lost much of its former importance; silks, cottons, and carpets. Pop. 20,000.

Khol (*koy*), tn., N.W. Persia; transit trade in wheat, barley, cotton, fruit. Pop. c. 30,000.

Khōjend, tn., Uzbek Rep., U.S.S.R., Asia, on R. Sir Darya; silk, cotton, textiles, coarse porcelain; fruit, vines. Pop. 37,000.

Khō'gand, town, Uzbek Rep., U.S.S.R., Asia, near R. Sir Darya, 120 m. S.E. of Tashkent; important trade centre; cotton factories and flour mills; exports silk. Pop. 68,000.

Khorasan. See **KHURASAN**.

Khotan, tn. and oasis, Sinkiang, China, in basin of R. Tarim; cereals, cotton, fruits; carpets, silk, metal work, and jade. Pop. c. 5,000. Dist. has area of 400 sq. m.; pop. c. 200,000.

Khol'na. (1) Dist., Bengal, India, largely deltaic; rice, jute; manufactures sugar and molasses from date-palm juice. Area, 2,011 sq. m.; pop. 1,453,000. (2) Chief tn. of above, 75 m. N.E. of Calcutta; trades in salt, rice, and sugar. Pop. 16,000.

Khunsar, tn., Persia, 100 m. N.W. of Isfahan; fine orchards; trades in dried fruits. Pop. c. 10,000.

Khurasan, formerly **KHORASAN**, prov., N.E. Persia; surface generally mountainous in N. and E., remainder of country mainly salt, marshy desert; here and there are fertile valleys; produces best wool in Persia; valleys yield rice, wheat, cotton, tobacco, opium, and fruits; turquoise mines at Maadan. Cap. Meshed. Area, c. 150,000 sq. m.; pop. c. 1,000,000.

Khurja (*koor'jā*), tn., United Provinces, India, 50 m. S.E. of Delhi; important commercial centre; cotton ginning and pottery. Pop. 26,000.

Khuzistan (*koos-i-stān*), formerly **ARABISTAN**, prov., S.W. Persia; mostly mountainous in N., but soil in

valleys very fertile; S. part largely plains and marshes; rice, maize, barley, cotton, wool, are produced. Extensive petroleum fields. Area, 25,700 sq. m.; pop. c. 350,000. Cap. Shustar; pop. 10,000.

Khyber Pass (*kē'ber*), or **KHAIBAR**, great pass from India to Afghanistan, through Safed Koh and Sulaiman mts.; 33 m. long, 40 to 450 ft. wide, with rocky precipices rising on each side to heights of from 1,400 to over 3,300 ft. Summit of pass is at Landi Kotal. Now traversed by railway from Peshawar.

Kiakhta. See **TROITSOKOLSAVSK**.

Kiangsi, prov., Central China, Asia; consists mainly of mountain ridges with intervening valleys; rice, wheat, silk, cotton, tea, tobacco; much valuable timber. Cap. Nanchang. Area, 69,480 sq. m.; pop. 24,467,000.

Kiangsu, mar. prov., China; numerous large lakes; intersected by canals; S. portion is 'garden of China'; alluvial soil produces rice, wheat, melons; cotton and silk are grown. Cap. Chinkiang. Area, 38,600 sq. m.; pop. 33,800,000.

Kiaochow Bay (*kē-ou-chow*), bay and terr., Shantung, China; leased by China to Germany (1898), captured by Japanese (1914), returned to China (1922); railway from chief port Tsingtao to Tsinan. Area of concession, c. 200 sq. m.

Kid'derminster, mkt. tn., Worcestershire, England, on R. Stour; carpet manufacture is the staple industry; worsted spinning and dyeing; iron and tinplate. Pop. 28,900.

Kids'grove, urb. dist., Staffs, England, in the Potteries; has coal mines and ironworks. Pop. 9,900.

Kid'welly, port, mkt. tn., Carmarthenshire, Wales, near Carmarthen Bay; coal mines and brick works. Pop. 3,200.

Kiel (*kēl*), port, Schleswig-Holstein, Prussia, on inlet of Baltic Sea; at entrance to Kiel Canal; Ger. naval station; fine harbour; univ.; observatory; shipbuilding, foundries,

breweries, oil and chemical works. Pop. 214,000.

Kiel Canal extends through Schleswig-Holstein from Brunsbüttel on Elbe to Kiel Bay, thus uniting North Sea with Baltic. Breadth at bottom, 72 ft.; at surface, 213 ft.; depth, 36 ft. Harbourage of Ger. High Seas Fleet during most of the Great War; now open to vessels of all nations at peace with Germany.

Kielce (*kyel'sa*), (1) County, Poland; mostly plateau, rising to 1,350 ft.; iron, coal, zinc, lead, and cereals. Area, 9,937 sq. m.; pop. 2,536,000. (2) Cap. of above, 100 m. s. of Warsaw; ropes, dyes, cottons, cement. Pop. 41,000.

Kiev (*ké'yev*), tn., Ukraine, U.S.S.R., on R. Dnieper; once cap. of Muscovite empire; cathedral of St. Sophia is oldest in Russia; commercial centre for s.w. Russia; machinery, hydraulic presses, grain elevators; tobacco, flour; sugar industry. Pop. 514,000.

Kikinda, VELIKA (*kik'in-dá vel'ik-a*), formerly NAGY KIKINDA, tn., Yugoslavia, 70 m. n. of Belgrade; agricultural and stock-raising centre; flour. Pop. 25,000.

Kikuyu (*ki-koo'yoo*), prov., Kenya Colony, bordering Uganda on the w. It includes Mt. Kenya; elevation between 4,500 and 18,600 ft.; climate temperate. Cap. Nyeri. Pop. (est.) 323,000.

Kilauea (*ké-lou-á'a*), largest active volcano in world, s.e. Hawaii, e. slope of Mauna Loa; elevation, 4,400 ft.; circumference, 8 m.

Kilbarchan (*kil-bar'han*), par., tn., Renfrewshire, Scotland, 5 m. w. of Paisley; linen factory; silk and cotton fabrics, Paisley shawls. Pop. (par.) 7,500.

Kilbirnie, tn. and par., n. Ayrshire, Scotland, on R. Garnock, 17 m. s.w. of Glasgow; flax spinning, linen thread, weaving of fishing nets. Pop. (par.) 8,000.

Kildare. (1) Co., Leinster, I.F.S.; most of surface flat, with bogs in n.; watered by Rs. Liffey, Boyne, Barrow, and crossed by two canals; plain of

Curragh is in centre; chief industry agriculture; potatoes, oats, barley; live-stock. Brewing and distilling. Area, 654 sq. m.; pop. 58,000. (2) Mkt. tn., cap. of above; cathedral; remains of castle and Carmelite friary. Pop. 2,100.

Kilimanjaro, extinct volcanic mountain to e. of Lake Victoria, Tanganyika Terr., E. Africa; highest point is volcanic cone of Kibo (19,324 ft.); large glaciers.

Kilindini. See MOMBASA.

Kilkee, tn., co. Clare, I.F.S., 8 m. w.n.w. of Kilrush; popular seaside resort; fishing. Pop. 1,700.

Kilkenny. (1) Co., Leinster, I.F.S.; undulating, rising in n.e. to over 1,000 ft.; drained by Rs. Barrow, Nore, Suir. Produces black marble, anthracite coal; manufactures beer, whisky, flour, leather; much arable and grazing land. Area, 796 sq. m.; pop. 71,000. (2) Chief tn. of above, on R. Nore; has R.C. cathedral; marble works and tanneries; brewing, bacon curing. Pop. 10,000.

Killaloe (*kil-la-loo*), tn., co. Clare, I.F.S., on R. Shannon; important salmon fishing. Pop. 900.

Killarney ('church of sloes'), mkt. tn., co. Kerry, I.F.S.; R.C. cathedral; bog-oak souvenirs. In vicinity are Lakes of Killarney, famous for beautiful scenery. Pop. 5,300.

Killiecrankie, Pass of, Perthshire, Scotland, through which R. Garry flows; 3 m. s.e. of Blair Atholl. In battle of Killiecrankie Claverhouse defeated Mackay, but was himself slain (1689).

Killin, par. and vil., Perthshire, Scotland, near head of Loch Tay; tourist centre; woollens. Pop. (par.) 1,500.

Killis, tn., Aleppo, Syria, 35 m. n. of Aleppo; olives cultivated. Pop. 20,000.

Killyleagh, port and par., co. Down, N. Ireland, on Strangford Lough; linen manufactured; exports agricultural produce. Pop. (par.) 4,300.

Kilmarnock, munic. burgh and tn., Ayrshire, Scotland, on Kilmarnock

Water; in one of richest mineral fields of Scotland; iron is staple trade; manufactures carpets, textiles, boots and shoes, porcelain and fireclay goods, railway stock, and machinery. Pop. 38,100.

Kilmaurs, tn. and par., Ayrshire, Scotland, on R. Carmel, 2 m. N.W. of Kilmarnock; hosiery and shoes; coal mining. Pop. (par.) 4,600.

Kilpat'rick. (1) NEW, or EAST, par., Dumbartonshire, Scotland; contains Bearsden, residential suburb of Glasgow. Pop. 13,900. (2) OLD, par., Dumbartonshire, Scotland, contains Clydebank. Pop. 56,000.

Kilren'ny and An'struther, royal burgh, Fife, Scotland, on Firth of Forth; fisheries. Pop. 3,300.

Kilrush, port, co. Clare, I.F.S., on R. Shannon; slate quarries; fisheries. Pop. 3,300.

Kilrath (*kil'sith*), tn., Stirlingshire, Scotland, 10 m. W. of Falkirk; limestone and sandstone quarries, coal and iron mines in vicinity; cotton factory. Pop. 7,600.

Kilwin'ning, tn., Ayrshire, Scotland, on R. Garnock, 4 m. E. of Ardrossan; engineering, iron smelting and founding, coal mining, and woollen manufactures. Traditional home of Freemasonry in Scotland. Pop. 5,300.

Kim'berley. (1) Chief tn., Griqualand West, Cape Prov., S. Africa; chief diamond-mining centre of the world. Pop. 40,000 (17,000 Europeans). (2) Tn., Notts, England, 5 m. N.W. of Nottingham; coal mines; brewing and knitting industries. Pop. 5,500.

Kincardine O'Neil, par. and vil., Aberdeenshire, Scotland, on R. Dee, 26 m. W. of Aberdeen; holiday resort; annual fairs. Pop. (par.) 2,040.

Kincardineshire, or THE MEARN, mar. co., E. Scotland; rises from coast to Grampian Mts.; deer forests, grouse moors; watered by Rs. North Esk, Bervie, Dee, and other streams; produces oats, barley, wheat; cattle and sheep raised; fishing important. Chief tns., Stonehaven (cap.), Laurencekirk, Bervie, Banchory. Area, 382 sq. m.; pop. 39,900.

Kinchinjan'ga. See KANCHENJUNGA.

Kin'der Scout, highest summit, Peak dist., N.W. Derbyshire, England; alt. 2,088 ft.; often called The Peak.

King'horn, royal burgh and seaside resort, Fife, Scotland, 3 m. S.W. of Kirkcaldy. Golf clubs made. Alexander III. of Scotland fell over cliffs and was killed (1286). Pop. 2,000.

Kings'bridge, port, s. Devon, England, on R. Salcombe; fishing; coasting trade; mild climate. Pop. 3,000.

Kings'clere, mkt. tn., N. Hants, England; malting, brewing, rope making; large training stables for racehorses. Pop. 2,200.

King's County. See OFFALY.

King's Lang'ley, par. and vil., Herts, England, 21 m. N.W. of London; site of anc. palace; remains of Dominican friary; paper mills. Pop. 2,000.

King's Lynn, port, Norfolk, England, on R. Great Ouse; has several buildings of antiquarian interest; fisheries; corn and cake mills; motor carriage and coach works; agricultural implements; shipbuilding. Pop. 20,600.

King's Norton, par. and tn., Worcestershire, England; suburb of Birmingham; paper, metal, and screw nails; par. contains model vil. of Bournville, with Cadbury's cocoa and chocolate works. Pop. (par.) 7,500.

King'ston. (1) Tn., New York, U.S.A., on Hudson R.; railway and canal terminus; railway repairing shops; manufactures shirts, cigars, and bricks. Pop. 28,000. (2) Tn., N.E. Pennsylvania, U.S.A., on R. Susquehanna, opposite Wilkes-Barre; anthracite coal mining; machinery; hosiery. Pop. 9,000. (3) Tn., Ontario, Canada, on Lake Ontario; shipyards and engine works; univ. Pop. 22,000. (4) Cap. and port, Jamaica, W. Indies; greatly damaged by earthquake (1907). Pop. 63,000.

Kingston-upon-Hull. See HULL.

King's-ton-upon-Thames, munic. bor. and mkt. tn., Surrey, England, part of

Greater London; riverside resort; market gardening; paper, machinery. Pop. 39,100.

Kings'town. (1) **DUN LAOGHAIRE** (*dŭ'ri*), tn. and mail-packet station, co. Dublin, I.F.S.; has spacious harbour; steamer service with Holyhead; sea-fishing centre; yachting rendezvous and favourite winter resort. Pop. 19,000. (2) Cap. and port, s.w. coast of St. Vincent, W. Indies; cotton, arrowroot, sugar, coconuts. Pop. 3,800.

Kings'winford, par. and vil., Staffs, England, $3\frac{1}{2}$ m. w. of Dudley; coal and iron mining; brick, tiles, iron goods, and glass. Pop. (par.) 22,000.

Kings'wood, urb. dist., Glos, England, $3\frac{1}{2}$ m. N.E. of Bristol; boots and shoes; market gardening. Pop. 13,300.

King-te-Chen', tn., N.E. Kiangsi, China, 85 m. N.E. of Nang-chang; famous since 11th cent. for porcelain ware; rice bowls. Pop. c. 300,000.

Kingussie (*king-ŭ'si*), burgh, Inverness-shire, Scotland, on R. Spey; favourite summer resort; annual fairs. Pop. 1,100.

King William's Town, tn., Cape Prov., S. Africa, on Buffalo R., 30 m. w. by N. of East London. Important commercial centre, with large trade in wool, hides, grain; jam, confectionery, soap, candles, and leather. Pop. 6,500 (Europeans).

Kinross, cap., Kinross-shire, Scotland, on Loch Leven; woollens; famous trout-fishing centre. Pop. 2,500.

Kinross'-shire, inland co., Scotland; surface consists of hills encircling central plain in which is Loch Leven; higher ground is adapted for sheep and cattle grazing. County produces grain, turnips, potatoes; coal, fire-clay, and limestone. Co. tn., Kinross. Area, 82 sq. m.; pop. 7,500.

Kinsale', port, co. Cork, I.F.S., on Kinsale Harbour; popular health resort; headquarters of S. of Ireland Fishing Co. Pop. 2,700.

Kintyre (*kin-tŭr*), or **CANTIRE**, peninsular dist., Argyllshire, Scotland;

about 42 m. long and 4 to 11 m. broad, and terminates at s. in bold promontory called Mull of Kintyre, only 13 m. from Ireland. Chief industries: distilling, dairy-farming, and stone quarrying. Chief tn., Campbeltown. Pop. 6,700.

Kioto. See **Kyoto**.

Kirchheim-unter-Teck (*kŕch'him*), tn., Württemberg, Germany, 15 m. S.E. of Stuttgart; hosiery, chemicals, soap, cement, machinery. Pop. 5,000.

Kirghia Republic (*kir-gŭ*), rep., U.S.S.R., central Asia, lying S.E. of Kazak and w. of China. Mountainous with a number of glaciers; extensive grazing ground for fat-tailed sheep, cattle, and goats; some agriculture and silkworm rearing. Cap. Frunze. Area, 98,400 sq. m.; pop. 990,000.

Kirin', (1) Prov., Manchuria, China; well watered and fertile; tobacco, pulse, millet, maize, wheat, barley, potatoes, the poppy. Area, 105,000 sq. m.; pop. 7,500,000. (2) Cap. of above; river port on Sungari R., with important dockyards. Pop. c. 100,000.

Kirkbur'ton, urb. dist., W. Riding, Yorks, England, 5 m. S.E. of Huddersfield; woollen and fancy goods; coal and iron mines. Pop. 3,200.

Kirk'by - in - Ash'field, urb. dist., Notts, England, 12 m. N.W. of Nottingham; coal mines. Pop. 17,800.

Kirkby Lons'dale (*kir'bi*), urb. dist. and mkt. tn., Westmorland, England, on R. Lune; grammar school; flagstones. Pop. 1,400.

Kirkby Moor'side (*kir'bi*), par. and mkt. tn., N. Riding, Yorks, England, 18 m. S.W. of Whitby; agricultural implements, bricks, and tiles. Pop. (par.) 1,700.

Kirkby Ste'phen (*kir'bi*), par. and mkt. tn., Westmorland, England, on R. Eden; slate quarries in neighbourhood. Pop. (par.) 1,500.

Kirkcaldy (*kir-kald'e*), port, royal burgh, Fife, Scotland, on Firth of Forth; called the 'lang toon' from its great length; linoleum and floor-cloth, linen manufacture, bleaching, ironfounding, oilcake making; pot-

teries, breweries, and engineering works. Pop. 43,900.

Kirkcudbright (*kîr-koo'brā*), co. tn. and royal burgh, Kirkcudbrightshire, Scotland, on R. Dee, 6 m. from Solway Firth; agricultural produce. Pop. 2,300.

Kirkcudbrightshire, mar. co., s.w. Scotland; rocky coast with numerous caves; surface hilly, rising in n.w. to over 2,760 ft. in Mt. Merrick; drained by Rs. Dee, Fleet, Ken, Urr; great part of surface is under grass; cattle, sheep, and horses raised; dairy farming carried on; large quantities of granite quarried. Chief tns., Kirkcudbright (co. tn.), Dalbeattie, Castle-Douglas. Area, 900 sq. m.; pop. 30,300.

Kirkheaton, urb. dist., W. Riding, Yorks, England, 2 m. e. of Huddersfield; woollen manufactures. Pop. 2,600.

Kirkintilloch, burgh, Dumbartonshire, Scotland, on Luggie Water, 6 m. n.e. of Glasgow; chemical works and iron foundries. Pop. 11,800.

Kirk-Kills'se, tn., European Turkey, 50 m. e. of Adrianople; chief trading station between Constantinople and Balkans; butter, cheese, wine, tobacco, and cereals. Bulgarians defeated Turks here (1912). Pop. 16,000.

Kirkland Lake, tn., Ontario, Canada, 60 m. n. of Cobalt; rich gold mines. Pop. 4,000.

Kirkley, coast par., Suffolk, England; included in munic. bor. of Lowestoft; fishing. Pop. 10,000.

Kirkstall, par. and vil., W. Lothian and Midlothian, Scotland, on R. Almond; distilling, malt extract. Pop. (par.) 5,400.

Kirkmaiden, par. in Rhinns of Galloway, Wigtownshire, forming peninsular southern extremity of Scotland, terminating in Mull of Galloway; dairy farming. Pop. 1,800.

Kirkoswald, par. and vil., Ayrshire, Scotland, 4 m. s.w. of Maybole; famous as residence of originals of Robert Burns's 'Tam o' Shanter' and 'Souter Johnny.' Pop. (par.) 2,200.

Kirkstall, par., W. Riding, Yorks,

England; part of Leeds; ironworks, brewing, and tanning. Pop. 5,500.

Kirkuk (*kîr-kook'*), or Kerkuk, tn., Iraq, 150 m. n. of Baghdad; great market centre trading in hides, salt, silks, cottons, fruit; petroleum wells. Pop. over 20,000.

Kirk'wall, city and royal burgh, port, and chief tn. of Orkney, Scotland; cathedral of St. Magnus, 12th cent.; market tn.; distilling. Pop. 3,500.

Kirriemuir, mkt. tn., Angus, Scotland, 5 m. n.w. of Forfar; birthplace of Sir J. M. Barrie, who has made it world-famous as 'Thürms'; linen. Pop. 3,300.

Kirsanov (*kîr-sā'nov*), tn., Russia, 300 m. s.e. of Moscow; iron smelting and flour milling. Pop. 25,000.

Kir Sheher (*kîr-shêr'*), tn., Asiatic Turkey, 85 m. s.e. of Angora; fine mosque; carpets. Pop. 68,000.

Kirt'ou-in-Land'sey, mkt. tn. and par., Lincolnshire, England, 9 m. n.e. of Gainsborough; cattle markets and large fairs; corn mills. Pop. (par.) 1,600.

Kish. See QAIS.

Kishangarh (*kîsh-un-gur'*). (1) Indian state, Rajputana, India; produces millet, barley, maize, cotton; garnets and marble. Area, 858 sq. m.; pop. 78,000. (2) Cap. of above, 18 m. n.e. of Ajmer; weaving, dyeing, cutting of precious stones. Pop. 9,500.

Kishinev. See CHISINAU.

Kishm. See QISHM.

Kish'on, riv. of central Palestine which drains Plain of Esdraelon and flows into Bay of Acre.

Kiskunfelegyhaza. See FÉLEGY-HÁZA.

Kislovodsk (*kîs-lo-vodsk'*), tn., N. Caucasian Area, Russia, U.S.S.R., 80 m. s.e. of Stavropol; mineral wells. Pop. 31,000.

Kisingen, tn., Bavaria, Germany, 62 m. e. of Frankfurt-on-Main; mineral springs. Pop. 6,600.

Kistna. (1) Riv. of s. India, rises in W. Ghats, and flows e. to Bay of Bengal; not navigable, but of great use for irrigation. Length, 800 m.

(2) Dist., Madras Presidency, India; drained by R. Kistna; rich agriculturally, producing cereals, cotton, tobacco, salt along coast. Cap. Masulipatam. Area, 5,907 sq. m.; pop. 2,133,000.

Kisumu, formerly PORT FLORENCE, port, L. Victoria, Kenya Colony, Africa; former terminus of Uganda Rly., with steamer service to Uganda ports; new line from Uganda Rly. into Uganda will lessen importance of tn. Pop. includes 150 whites and 1,200 Asiatics.

Kitchener, formerly BERLIN, city and port, Ontario, Canada, 60 m. w. of Toronto; manufactures furniture, boots and shoes, iron goods, motor-cars; sugar refining. Utilizes Niagara water-power. Pop. 22,000.

Kitzingen, tn., Bavaria, Germany, on R. Main, 10 m. s.e. of Würzburg; brewing, coopering, horse-hair spinning; cement; river trade. Pop. 10,000.

Kiukiang, port, Kiangsi, China, on Yangtze Kiang; exports green tea, porcelain, beans, grasscloth, cotton, camphor. Pop. 71,000.

Kiushiu. See KYUSHU.

Kivu (*Az'woo*), lake, Belgian Congo, Central Africa, discharging into Lake Tanganyika by R. Russisi; contains numerous islands. Alt. 5,000 ft.; area, 1,100 sq. m.

Kizil Irmak ('red river'), largest riv. of Asia Minor; rises in the Kizil Dag, and flows into Black Sea. Length, c. 600 m.

Kizil-Kum. See QIZIL QUM.

Kizlyar, tn., Daghestan, U.S.S.R., on delta of R. Terek, near Caspian Sea; famous wine. Pop. 9,600.

Klad'no, tn., Bohemia, Czechoslovakia, 16 m. w.n.w. of Prague; coal and iron mines; iron, steel, and bridge-building works. Pop. 19,000.

Klagenfurt, cap. of Carinthia, Austria, on R. Glan; iron foundries; machinery; white lead. Pop. 27,000.

Klaipėda, formerly MEMEL, port, Lithuania, on Kurisches Haff; centre of Baltic timber trade; shipbuilding. (3,601).

ironfounding, brewing; chemicals, soap; herring fisheries. Pop. 37,000.

Klausenburg. See CLUJ.

Klausthal (*Klaus'tail*), tn., Hanover, Prussia, in Harz Mts., 30 m. s.e. of Hildesheim; silver and lead mining. Pop. 12,000.

Klerks'dorp, tn., Transvaal, S. Africa, on trib. of R. Vaal, 100 m. s.w. of Johannesburg; important cattle centre; gold. Pop. 5,700.

Kleve. See CLEVE.

Klon'dike, small riv., Yukon Terr., Canada, which joins Yukon R. at Dawson City; gives its name to gold-bearing dist., which in 1896 drew diggers from all parts of the world; output of gold greatly decreased.

Klosterneuburg (*Klos-ter-noi'boorg*), tn., Austria, on R. Danube, near Vienna; wines and cement. Pop. 14,000.

Knares'borough, mkt. tn., W. Riding, Yorks, England, on R. Nidd, 3 m. n.e. of Harrogate; agricultural produce, linen, and leather. Famous petrifying dropping well. Pop. 5,900.

Knin, tn. and fortress, Dalmatia, Yugoslavia; on rly., 36 m. n. of Split; centre of agricultural dist. Pop. 23,000.

Knoche-sur-Mer, wat.-pl., W. Flanders, Belgium, 11 m. n.e. of Bruges; favourite holiday resort.

Knot'ingley, urb. dist., W. Riding, Yorks, England, on R. Aire, 14 m. s.e. of Leeds; breweries, potteries, roperies, and bottle works; limestone. Pop. 6,800.

Knoxville, city, Tennessee, U.S.A., on Tennessee R.; has marble quarrying, and coal, iron, zinc, and copper mines; textiles, furniture; iron foundries and rolling mills. Pop. 106,000.

Knuts'ford, urb. dist. and mkt. tn., Cheshire, England, 10 m. s.w. of Manchester; favourite residence of Manchester merchants; leather, cotton, worsted. Pop. 5,900.

Kob'do, tn., n.w. Mongolia, Asia; important cattle market; trade in wool, skins, and sheep. Pop. 6,000.

Ko'be, tn., Houshu, Japan, on

Osaka Bay; now includes Hiogo; fine harbour, important seaport; shipbuilding. Pop. 644,000.

Koblens. See COBLENZ.

Ko'chi, tn., Shikoku, Japan; noted for coral, and long-tailed fowls; paper making. Pop. 66,000.

Kodok, formerly FASHODA, tn., Anglo-Egyptian Sudan, on White Nile; dist. produces cotton under irrigation.

Koffylon'tein, tn., Orange Free State, S. Africa, 45 m. S.E. of Kimberley; diamond mine of same name in vicinity. Pop. 3,300.

Kofu (*ko'foo*), tn., Honshu, Japan, 80 m. W. of Tokyo; silk and sweetmeats. Pop. 68,000.

Kohat'. (1) Dist., N.W. Frontier Province, India; mountainous with many rivers; salt mines, petroleum, and sulphur. Area, 2,694 sq. m.; pop. 220,000. (2) Cap. of above, 37 m. S. of Peshawar; commands Kurran Pass from Afghanistan. Pop. 28,000.

Kohistan' ('country of the hills'), geographical name applied to several mountainous districts of Asia. (1) Mountain mass in central Persia, surrounded by deserts. (2) High valleys to N. and E. of Kabul, Afghanistan, whose inhabitants, the Kohistani, stubbornly resisted Brit. occupation of Kabul. (3) Mountainous dist. which separates Afghanistan from upper valley of Indus on Peshawar border. (4) Tract of barren and sparsely populated country, extending from W. of Sind into Baluchistan.

Kokand. See KHOQAND.

Ko'komo, city, Indiana, U.S.A., 50 m. N. of Indianapolis; glass, lumber products, rubber goods, steel wire. Pop. 33,000.

Koko-Nor, lake, N.E. Tibet, central Asia; alt. 9,950 ft.; length, 60 m.; breadth, 40 m.

Kok'stad, tn., Griqualand East, N.E. Cape Prov., S. Africa; health resort; centre of good grazing country; cheese making. Pop. 3,300.

Ko'la, peninsula, N. Russia, between Barents Sea and White Sea; mainly plateau (c. 700 ft.); numerous lakes,

rivers, and marshes; unproductive soil; cattle and pigs in some of the valleys; reindeer raised; herring and salmon. Chief tn., Murmansk. Area, 50,000 sq. m.; pop. 23,000.

Kolaba', dist., Bombay Presidency, India, lying between W. Ghats and sea; hilly; coast fringe produces coconuts and betel nuts; rice further inland; salt manufacture. Cap. Alibagh, 20 m. S. of Bombay. Area, 2,169 sq. m.; pop. 563,000.

Kolar'. (1) Dist., Mysore, India; most important gold-producing dist. in India; sugar, molasses, silk, cotton. Area, 3,149 sq. m.; pop. 705,000. (2) Cap. of above, 40 m. N.E. of Bangalore; manufactures coarse blankets. Pop. 13,000.

Kol'berg, tn., Pomerania, Prussia, on Baltic Sea; foundries and machine-works, distilleries; salmon and lamprey fishing. Pop. 30,000.

Kol'ding, mkt. tn., E. coast of Jutland, Denmark; woollen cloth; exports cattle. Pop. 17,000.

Kolhapur'. (1) Indian state, S. Bombay, India; hilly in W., plateau in E.; rice, millet, sugar, tobacco, and cotton. Area, 3,217 sq. m.; pop. 834,000. (2) Cap. of above, 80 m. N.E. of Goa; manufactures cotton, lace, paper, and pottery. Pop. 56,000.

Kolin (*ko-lén*), tn., Bohemia, Czechoslovakia, on R. Elbe, 38 m. E. of Prague; sugar, flour, chemicals, beer, starch. Pop. 16,000.

Kolmar. See COLMAR.

Köln. See COLOGNE.

Kolomena. See KOLOMYJA.

Kolom'na, tn., Moscow, Russia, on R. Moskva, 60 m. S.E. of Moscow; agricultural products; locomotives and railway wagons. Pop. 18,000.

Kolomyja (*ko-lo-mé'a*), formerly KOLOMEA, tn., Poland, on R. Prut, 100 m. S.E. of Lwow; agricultural products, pottery, candles; great rly. centre. Pop. 32,000.

Kolosvar. See CLUJ.

Komarom', tn., Czechoslovakia, on R. Danube; cereals, tobacco, timber, and cattle; good harbour, and river craft built. Pop. 18,000.

Komati (*kō-mā'tē*), riv., S.E. Africa; rises in Transvaal and enters Indian Ocean at Delagoa Bay. Length, c. 500 m.

Komatsu, tn., w. coast of Honshu, Japan; silk and gauze; supplies most of the clay for Terai and Kanazawa potteries. Pop. 12,000.

Komi, or **ZIRIAN**, dist., N. Russia, lying w. of Ural Mts.; half of it N. of Arctic Circle. In N. is tundra, where large herds of reindeer are bred; farther S. is taiga forest, mostly pine; tar, pitch, timber products; hunting fur-bearing animals. Area, 171,399 sq. m.; pop. 207,000.

Komotau. See **CHOMUTOV**.

Konakri (*kon-ā-kri'*), port and cap. of French Guinea, W. Africa; rubber, coffee, ground-nuts, and gum; terminus of French Guinea Rly. Pop. 9,000.

Kong, inland tn., French Ivory Coast, W. Africa; indigo, kola nuts, cloth, and salt. Pop. 15,000.

Kongsberg, tn., Norway, on R. Laagen, 60 m. W.S.W. of Oslo; silver mines, smelting, and royal mint. Pop. 7,500.

Kōnia, or **KONYA**. (1) Vilayet, Asia Minor, with Taurus Mts. in S.; opium, gold, chrome ore, and mercury. Area, 39,410 sq. m.; pop. 504,000. (2) Cap. of above, on rly. to Baghdad, anc. Iconium; plum and apricot orchards; carpets and silks. Pop. 47,000.

Königsgrätz. See **HRADEC KRÁLOVÉ**.

Königsberg (*ke'nigz-berg*), cap. of E. Prussia, on R. Pregel; commercial and industrial centre of E. Germany; great tea centre of Europe; univ.; 14th cent. cathedral; shipbuilding. Machinery, wood pulp, chemicals, sugar, tobacco, beer, amber articles manufactured. Exports cereals, timber, flax, hemp, flour. Pop. 280,000.

Königshütte. See **KROLEWSKA HUTA**.

Königssee (*ke'nigz-sē*), lake, Bavaria, Germany, 15 m. S. of Salzburg; elevation, 1,850 ft.; almost enclosed by precipitous limestone mts.; well

stocked with salmon and Alpine trout.

Konitz. See **CHOJNICE**.

Konstanz (*kon-stants'*), formerly **CONSTANCE**, tn., Baden, Germany, at exit of R. Rhine from L. Constance; 11th cent. cathedral; textiles, machinery, chemicals. Pop. 31,000.

Koorin'ga, tn., S. Australia, 85 m. N. of Adelaide; centre of wheat dist.; famous Burra-Burra copper mine, now closed, is near the town. Pop. 2,600.

Kootenay. (1) Riv., Brit. Columbia, Canada; rises in Rocky Mts., loops into Montana and Idaho (U.S.A.), flows through Kootenay Lake, and joins Columbia R. Length, 400 m. (2) Lake, Brit. Columbia; 60 m. long, 1 to 4 m. wide. (3) Dist., Brit. Columbia, drained by Kootenay R.; mountainous, diversified by valleys and lakes; famous fruit-farming area; great mineral wealth; coal, iron, gold. Chief tn., Nelson. Area, 26,346 sq. m.

Kō'penick, tn., Brandenburg, Prussia, on isl. in R. Spree; suburb of Berlin; cotton, carpets; chemicals, sealing wax, glass. Pop. 31,000.

Köprülü. See **VELES**.

Kordofan, prov., Anglo-Egyptian Sudan, w. of White Nile; rolling plains, with peaks rising to 2,600 ft.; no rivers except in S.E.; millet, gums; cattle and camels reared; exports gum, hides, ivory, ostrich feathers. Cap. El Obeid. Area, 130,000 sq. m.; pop. (est.) 671,000.

Kore'a (Jap. *Chosen*), peninsular country with many islands, E. coast of Asia; lies between Yellow Sea and Sea of Japan. Annexed by Japan in 1910. Surface is mountainous, drained by Rs. Han, Tai-dong, Yalu, Tumen, and other streams. Principal industry is agriculture, but methods are extremely primitive. Rice, barley, wheat, and other grains, tobacco, cotton, cattle are produced. There is some whale-fishing, and many small fishing colonies are round shores. Minerals include gold, which is extensively worked, coal, copper, iron, graphite,

mica. Cap. Seoul. Rly. mileage, c. 2,000. Area, 84,949 sq. m.; pop. 19,200,000.

Koritsa (*kor'che*), tn., s.e. Albania; flour, and tobacco factories; woollens and carpets. Pop. 26,000.

Kos. See **Cos.**

Kosciusko (*kos-i-us'ko*), mt. peak, Australian Alps, New South Wales; highest peak in Australia (7,336 ft.); has meteorological station; home of Australian Alpine sports.

Kosice (*ko'shit-se*), formerly **KASSA**, tn., E. Slovakia, Czechoslovakia, on R. Hernad; woollen goods; distilling, brewing, sawmilling. Pop. 53,000.

Koslin, tn., Pomerania, Prussia; brewing, textiles, soap, tobacco. Pop. 29,000.

Kostroma'. (1) Prov., central Russia; surface is undulating plateau; winter severe; dairying and agriculture; timber; cotton and linen manufactures. Area, 13,340 sq. m.; pop. 810,000. (2) Cap. of above, on R. Volga; linen, tobacco, wooden articles; univ. Pop. 68,000.

Ko'tah. (1) Indian state, Rajputana, India; cereals, tobacco. Area, 5,684 sq. m.; pop. 630,000. (2) Cap. of above, 120 m. s. of Jaipur; muslins. Pop. 32,000.

Köthen. See **CÖTHEN**.

Kot'ka, port, Finland, on Gulf of Finland; exports wood pulp and timber. Pop. 16,000.

Ko'tor, formerly **CATTARO**, tn., port, Montenegro, Yugoslavia, on Adriatic; fine natural harbour; lace making; trade in cheese. Pop. 2,800.

Kottbus (*kot'boos*), tn., Prussia, on R. Spree, 70 m. s.e. of Berlin; cloth making; tobacco, brandy, machinery. Pop. 50,000.

Kovno. See **KAUNAS**.

Kovrov', tn., Vladimir, Russia, 95 m. w. of Nijni-Novgorod; textiles, railway stock; timber mills, copper, and iron foundries. Pop. 26,000.

Koweit. See **KUWAIT**.

Kow'loon, peninsula, China, opposite Hong Kong, and now part of it politically; ceded to Gt. Britain in 1860. Area, 376 sq. m.; pop. 264,000.

Kozlov', tn., central Russia, 150 m. s.e. of Tula; important rly. jn.; railway workshops and flour mills; sausages; large trade in eggs, cattle, meat, hides. Pop. 54,000.

Kragujevac (*kra'goo-yá-vats*), tn., Serbia, Yugoslavia, 60 m. s.s.e. of Belgrade; government arsenal; textiles; flour mills. Pop. 16,000.

Krajova. See **CRAIOVA**.

Krakata'o, volcanic isl., Strait of Sunda, between Sumatra and Java, where one of most terrible volcanic eruptions occurred in 1883, when greater part of isl. was blown up; followed by enormous ocean waves which destroyed several hundred villages and caused great loss of life. The ascending dust gave rise to a succession of widely distributed brilliant sunsets in the following winter and spring.

Kraslice (*kras'lit-se*), formerly **GRASLITZ**, tn., Bohemia, Czechoslovakia, in Erzgebirge; musical instruments, lace, buttons, clocks. Pop. 10,000.

Krasnodar', formerly **ÉKATERINODAR**, tn., N. Caucasian Area, U.S.S.R., on R. Kuban; glass, chemicals, tobacco; naphtha. Pop. 163,000.

Krasnovodak', tn., Turkmen Rep., U.S.S.R., on E. shore of Caspian Sea, opposite Baku; terminus of Trans-Caspian Rly.; 69 ft. below sea-level; exports cotton and dried fruits. Pop. 10,000.

Krasnoyarsk', tn., Siberian Area, U.S.S.R., on Trans-Siberian Railway and R. Yenisei; gold refining; leather, porcelain, machinery. Pop. 72,000.

Kri'wang, residency, w. Java, Dutch E. Indies. Mainly flat, but hilly in s.e. Rice, coconuts, rubber, tea, cinchona; extensive forests. Area, 19,872 sq. m.; pop. 800,000.

Krefeld. See **CHEFFELD**.

Kremenchug', tn., Ukraine, U.S.S.R.; important river port on R. Dnieper; centre for grain and timber; flour, tobacco, and agricultural machinery. Pop. 58,000.

Krems, tn., Austria, on R. Danube; white lead, mustard, vinegar. Pop. 18,000.

Kremsier. See KROMERIZ.

Kreuzburg (*kroits'boorg*), tn., Prussian Silesia, 59 m. E. of Breslau; sugar, machinery, flour. Pop. 12,000.

Kreuznach (*kroits'nach*), tn., Rhineland, Germany, 28 m. S.W. of Mainz; mineral springs; tobacco, chemicals, leather. Pop. 25,000.

Krimmitschau. See CRIMMITSCHAU.

Krishnagar, tn., Bengal, India, 55 m. N. of Calcutta; artistic clay figures. Pop. 25,000.

Kristiansand. See CHRISTIANSAND.

Kristianstad, port, S. Sweden; engineering, distilling; sugar factories. Pop. 13,000.

Krivoi Rog, tn., Ukraine, U.S.S.R., 100 m. N.E. of Kherson; centre of dist. rich in iron, copper, coal, slate, lithographic stone; chemicals. Pop. 31,000.

Erk (*herk*) (Italian *Veglia*), island, Adriatic; belongs to Yugoslavia; red wine. Area, 156 sq. m.; pop. 29,000.

Krnov (*hur'nof*), formerly JAGERN-DORF, tn., Silesia, Czechoslovakia, on R. Opava; woollens and machinery. Pop. 21,000.

Krolewska Huta (*krn-lef'ska*), formerly KÖNIGSHÜTTE, tn., Poland, adjoining Prussian Silesia; centre of Upper Silesian coal and iron dist.; foundries, rolling mills; bricks and glass. Pop. 73,000.

Kromeriz (*kröm'yer-zhězh*), tn., Moravia, Czechoslovakia, on R. Morava; fruit, cereal, and cattle market; agricultural machinery, flour, beer. Pop. 57,000.

Kro'nenberg, tn., Rhineland, Prussia, 7 m. S.S.W. of Elberfeld; foundries, steel works. Pop. 14,000.

Kron'stadt. (1) Port, fortress, and great naval arsenal, Russia, on isl. at head of Gulf of Finland; ice-bound from December till end of May. Pop. 62,000. (2) See BRASOV.

Krotoszyn (*krō-to-shën'*), tn., Poland, 55 m. S.E. of Poznan; sawmills, breweries; trade in grain, wool, cloth, furs. Pop. 13,000.

Krugersdorp, tn., Transvaal, S. Africa, 20 m. W. of Johannesburg;

gold-mining centre. Pop. 14,500 whites.

Krusevac (*krū'she-vats*), tn., Serbia, Yugoslavia, 35 m. N.W. of Nish; cap. of Serbia till 1389; explosives, railway trucks. Pop. 6,500.

Kual'a Lum'pur, cap. of Selangor, Malay States; centre of tin mining; rubber, rice, pepper, tapioca. Pop. c. 80,000.

Kuban'. (1) Riv., S. Russia, 450 m. long; rises on Mt. Elbruz; enters Black Sea S. of Taman peninsula, and sends a branch N. to Sea of Azov. (2) Prov., N. Caucasian Area, U.S.S.R.; includes valley of R. Kuban and N. slope of Caucasus range with coast of Sea of Azov; agriculture; horses and cattle; petroleum, coal, salt. Area, 36,645 sq. m.; pop. 2,626,000.

Kuch Behar. See COOCH BEHAR.

Kuen-lun. See KUNLUN.

Kuka (*hoo'ka*), tn., Bornu, Nigeria, on W. shore of Lake Chad; formerly great slave-trading centre; caravan trade. Pop. (est.) 60,000.

Kuldja (*hoo'ya*), prov. of Sinkiang, China; plateau crossed by mountains; drained by R. Ili; grains, fruits, vines, cotton; stock rearing. Cap. Kuldja. Pop. 10,000.

Kulm. See CHELMNO.

Kulmbach (*hoolm'bach*), tn., Bavaria, Germany, 11 m. N.W. of Bayreuth; textiles; chemicals; black beer. Pop. 12,000.

Kum. See QUM.

Kumamoto, city, Kyushu, Japan, 50 m. N.E. of Nagasaki; ruined 16th cent. castle; much-frequented Buddhist temple outside town. Pop. 147,500.

Kumasi (*hoo-mā'sē*), cap., Ashanti, Gold Coast, W. Africa; on rocky eminence; trading centre. Pop. c. 25,000.

Kunsun (*hoo-mā'oon*), div., United Provinces, India; greater part occupied by southern Himalayas; important forested areas; fruit, rice, wheat in valleys. Chief tn., Naini Tal. Area, 13,725 sq. m.; pop. c. 1,300,000.

Kumbakonam, sacred city, S.E. Madras, India, 25 m. N.E. of Tanjore;

metal-ware, silk and cotton fabrics, sugar, pottery. Pop. 61,000.

Kune'ne, riv., Angola, W. Africa; rises in Benguela plateau (5,800 ft.); enters Atlantic Ocean; for 200 m. from mouth forms boundary between Angola and S.W. Africa; sandbanks at mouth; length, 720 m.

Kungur (*koong-goor*'), tn., Ural Area, Russia, 58 m. S.S.E. of Perm; tanneries, soap and shoe factories; important fair; alabaster quarries. Pop. 20,000.

Kunlun Mountains (*moon-loon*'), mt. system, forming one of loftiest ranges in Asia, and constituting N. wall of Tibetan plateau; general direction w. to e.; length, c. 2,300 m.; main chain divides into parallel chains: (1) Western, from Pamir to Tashdavan pass in Altyn-Tagh section of range, where trade route from Tarim valley to Lhasa crosses mts. (2) Central, from Lhasa-Tarim route to s. of Lan-chow. (3) Eastern, lying wholly in China from s. of Lan-chow to a little e. of Ho-nan city. System continued by mts. of N. China (Ku-liang, Ala-shan, and In-shan), to join highlands of N.E. Asia in the Greater Khingan range.

Kuopio (*ko-o'-pe-o*). (1) Dept., central Finland; dairy farming and cattle rearing; iron obtained. Area, 13,984 sq. m., excluding water; pop. 377,000. (2) Cap. of above, on Lake Kallavesi; important trading centre. Pop. 24,000.

Kurdistan, extensive mountainous region of w. Asia, extending southwards from the riv. Aras to the plains of Iraq, and from the Euphrates e. to Urmia in Persia. Much of it is grass-covered tableland where sheep are raised in large numbers. Watered by tribs. of Rs. Euphrates and Tigris. Inhabitants are the turbulent Kurds. Persia, Iraq, and Turkey claim portions of the territory. Area, c. 52,000 sq. m.; pop. c. 1,500,000.

Kurgan, tn., Ural Area, R.S.F.S.R., on R. Tobol; on Trans-Siberian Rly.; agricultural machinery, leather, flour; exports butter; annual fairs. Pop. 28,000.

Kuria-Muria (*ko'o're-a-moo're-a*), group of rocky islands off S.E. coast of Arabia; attached to Aden; guano.

Kuril Islands (*ko'o'rē*), series of thirty-two small volcanic islands between Kamchatka and Japan; ceded to Japan by Russia (1875); largest are Kunashiri and Etorop; generally fog-bound; numerous hot springs; seal hunting and salmon fishing. Area, 6,169 sq. m.; pop. c. 4,500.

Kurisches Haff, shallow lagoon on s. coast of Baltic Sea, partly in E. Prussia and partly in Lithuania; about 60 m. long; almost separated by line of sand dunes from sea. Area, 680 sq. m.

Kurnool. (1) Dist., Madras, India; watered by Kistna and other rivs.; immense forests; iron ore, steatite, lead, not much worked; millet, cotton, oil-seeds; subject to drought. Area, 7,580 sq. m.; pop. 915,000. (2) Cap. of above, 105 m. s. of Hyderabad; carpets and coarse cotton cloth. Pop. 28,000.

Kursk (*koorsk*). (1) Prov., Russia, N. of Ukraine; rich soil, drained by numerous streams; rye, oats, potatoes, hemp, wheat, millet, beetroot; beautiful orchards; flour milling, sugar refining, distilling. Area, 17,266 sq. m.; pop. 2,904,000. (2) Cap. of above, 330 m. s. by w. of Moscow; confectionery, soap, tobacco; distilleries, iron foundries, flour mills; annual fair. Pop. 99,000.

Kurume (*ko-o-roo-mū*'), tn., Kyushu, Japan, 55 m. N.N.E. of Nagasaki; extensive manufacture of blue cotton fabric. Pop. 72,000.

Kushiro, open port, S.E. Hokkaido, Japan; large timber export; important fisheries. Pop. 16,000.

Kustanaisk (*koos-ta-nisk*'), tn., Kazak Rep., U.S.S.R., on R. Tobol, 250 m. S.W. of Petropavlovsk; tanneries, flour mills, and tallow manufacture; important centre of trade in fertile steppe. Pop. 25,000.

Küstlin (*koos-trēn*'), tn., Prussia, Germany, at confluence of rivs. Warthe and Oder, 52 m. by rail e. of Berlin; rly. jn.; formerly forti-

fied; machinery, hardware. Pop. 18,000.

Kutalah (*koo-ti'yd*), tn., Asia Minor, 75 m. s.e. of Brusa; manufactures carpets and earthenware. Pop. 70,000.

Kutais (*koo-tis'*). (1) Government of Georgia, U.S.S.R.; valuable timber, chiefly walnut; wheat, maize, tobacco; eucalyptus and camellia; gold, silver, copper, lead, and manganese ores, also naphtha wells. Chief port, Batum. Area, 8,145 sq. m.; pop. 1,070,300. (2) Cap. of above; silks; trade in fruit. Pop. 46,000.

Kut-al-Imara (*koot-el-i-mā'ra*), small tn., Iraq, almost surrounded by R. Tigris. During Great War captured by Brit. from Turks; recaptured (1916) by Turks after long siege; finally captured by Brit. (1917). Carpets. Pop. c. 6,000.

Kut'na Hor'a, formerly KUTTENBERG, tn., Bohemia, Czechoslovakia, 45 m. E. by s. of Prague; tobacco, sugar. Pop. 14,000.

Kutno (*koot'no*), tn., Warsaw govt., Poland, 69 m. w. of Warsaw; breweries and distilleries. Pop. 11,000.

Kuttenberg. See KUTNA HORA.

Kuwait, AL, formerly KOWEIT, port, Arabia, head of Persian Gulf; fine natural harbour; exports horses, sheep, wool. Pop. 50,000.

Kuznetsk', tn., Saratov prov., Russia, 160 m. s.w. of Samara; agricultural implements, leather, ropes, bricks. Pop. 30,000.

Kwanhengtse. See CHANG-CHUN.

Kwangchow-wan, bay and terr., s.e. China; free port; exports pigs, cattle, straw, ground-nuts, sugar; leased to France (1898) for 99 years, and under govt. of French Indo-China. Cap. Fort Bayard. Area, 190 sq. m.; pop. 250,000.

Kwangsi, prov., s. China, consisting of upper part of basin of Si-kiang; produces cassia, sugar, tobacco, rice, hemp, indigo, and silk; cinnamon, and camphor trees. Cap. Kweilin. Area, 77,200 sq. m.; pop. 12,260,000.

Kwangtung'. (1) Mar. prov. of s. China; crossed by mt. ranges except in lower basin of Si-kiang; produces

rice, tea, sugar, sub-tropical fruits, mulberry, salt and fresh water fish. Cap. Canton. Area, 99,970 sq. m.; pop. 37,000,000. (2) S. portion of Liaotung Peninsula, s. Manchuria, China; leased to Japan by China; produces maize, millet, beans, wheat, tobacco, hemp, vegetables; important fisheries. Area, 1,438 sq. m.; pop. 1,147,000.

Kwan'za, river, Angola, W. Africa; rises in Bihé plateau and enters Atlantic. Course broken by rapids and falls. Length, 700 m.

Kweichow', inland prov. of s.w. China; mainly hilly; well watered; gold, silver, and quicksilver; cereals, goatskins, wild silk, and timber. Cap. Kweiyang. Area, 67,160 sq. m.; pop. 11,115,000.

Kweilin', cap. of Kwangsi prov., China, on R. Kwei; trade in silks and skins. Pop. 100,000.

Kweiyang, cap. of Kweichow prov., China; trade centre. Pop. c. 100,000.

Kyaukse'. (1) Dist., Burma, irrigated by nine canals; chief crop, rice. Area, 1,282 sq. m.; pop. 143,000. (2) Cap. of above, 30 m. s. of Mandalay. Pop. 6,000.

Kyles of Bute, narrow, winding arm of Firth of Clyde, between Bute I. and Argyllshire, Scotland; favourite steamer route in summer; picturesque scenery.

Kyneton, tn., Victoria, Australia, 50 m. n.w. of Melbourne; school of mines; agricultural implements. Pop. 3,400.

Kyoto (*kē-ō'tō*), city, s. Honshu, Japan; former cap.; beautiful temples and shrines; univ.; pottery, porcelain, bronzes, silks, fans, embroidery, enamel ware. Pop. 680,000.

Kyushu (*kyoo'shyoo*), formerly KRU-SHU, most southerly of the four large islands of Japan; mountainous and volcanic; hot springs and solfataras; rice, tea, tobacco; coal; famous pottery; chief port, Nagasaki; rly. tunnel being constructed to connect isl. with Honshu. Area, 16,201 sq. m.; pop. 7,750,000.

Kynstendil, tn., Bulgaria, 43 m. s.w. of Sofia; hot mineral springs; vicinity raises fruit, vines, tobacco. Pop. 15,000.

Karl-Orda (*ki-ol'*), cap., Kazak Rep., U.S.S.R., on R. Sir Darya, and Central Asian Rly.; 310 m. n.w. of Tashkent. Pop. 8,500.

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Laaland, isl., Baltic Sea, at s. end of Great Belt; coast much indented; surface low and fertile; beech and oak forests; forms part of Denmark. Cap. Maribo. Area, 444 sq. m.

Labrador, peninsula, N. America, between Hudson Bay and Gulf of St. Lawrence; part belongs to Newfoundland (with an area of c. 110,000 sq. m., and pop. 4,000), and remainder to Quebec. Surface is mainly a plateau, 2,000 ft. above sea-level. Along Atlantic coast, cod, salmon, and herring fishing and sealing are important industries during summer. Area, c. 520,000 sq. m.; pop. c. 15,000.

Labuan (*la-bu-an*), Brit. isl., Malay Archipelago, 6 m. n.w. of Borneo; administered as part of Straits Settlements; rice, coconuts, sago, rubber; excessive rainfall. Area, 30 sq. m.; pop. 6,000.

Laccadive Islands (*lak'a-div*), group of fourteen coral islands in Indian Ocean off w. coast of Madras; flat, low, barren; discovered by Vasco da Gama (1498); administered by Madras; produce coconuts and coir. Area, c. 80 sq. m.; pop. 14,000.

Lachine (*la-shen*), tn., Montreal L., Quebec, Canada, at head of Lachine Rapids, 8 m. s.w. of Montreal; bridge-building works, wire-rope factory, lumber yards; favourite pleasure resort. Pop. 15,000.

Lachlan (*lach-lan*), riv., New South Wales, Australia; rises in Blue Mts.; joins Murrumbidgee; navigable only in rainy season; length, 700 m.

Lackawan'an, city, New York, U.S.A., on L. Erie; ironworks and steel foundries. Pop. 18,000.

Laconia (*la-kon-a*), city, New

Hampshire, U.S.A., 22 m. n. of Concord; hosiery and knitting machines. Pop. 11,000.

La Crosse, tn., Wisconsin, U.S.A., on Mississippi R.; railway centre; lumber trade; flour and grist mills. Pop. 40,000.

Ladakh, prov., E. Kashmir, between Himalayas and Karakoram Mts.; drained by Indus R.; one of the most elevated regions of the earth; cultivation confined to valleys and sheltered spots; gold found; originally part of Tibet. Cap. Leh. Pop. c. 37,000.

Ladoga, LAKE (*lad'o-ga*), lake between Russia and Finland, largest in Europe; coast-line of w. and n. is rocky, s. and e. low, marshy; drained by R. Neva; rich in fish; mean depth, 300 ft.; area, 7,000 sq. m. Canal constructed along s. shore (1861-6) to secure communication with Leningrad in stormy weather.

Ladrones. See MARIANAS ISLANDS.

Ladybank, burgh, Fife, Scotland, 5 m. s.w. of Cupar; rly. jn.; linen and malting industries. Pop. (including Monkston) 1,100.

Ladybrand, tn., Orange Free State, S. Africa, 80 m. E. of Bloemfontein; in rich and well-cultivated dist.; a health resort. Pop. c. 4,000.

Ladysmith, tn., Natal, S. Africa, 80 m. n.w. of Pietermaritzburg; coal-mining district; railway workshops. Notable defence (1899-1900) by Brit. in S. African War. Pop. 7,000.

Lafayette (*la-fa-et*). (1) City, Indiana, U.S.A., 130 m. s.e. of Chicago; machinery, farm implements, wagons; lumber mills. Pop. 26,000. (2) Tn., Louisiana, U.S.A., 55 m. w.s.w. of Baton Rouge; sugar and cotton-seed oil. Pop. 8,000.

Lagos (*lā'gos*). (1) Cap. of Nigeria, Brit. W. Africa; has the only natural harbour on Slave Coast for distance of 1,000 m.; has been made a first-class port, and is now an important commercial town and wireless station; connected with interior by rail; engineering and repairing workshops. Pop. c. 100,000. (2) Seapt., s. Portugal; has good harbour; tunny fisheries and coasting trade. Pop. 10,000.

La Guaira (*la gwa'ra*), or **LA GUAYRA**, port, Venezuela, S. America; connected by rail with Caracas; good harbour; exports coffee, cocoa, hides, and sugar. Pop. 8,000.

Laguna (*la-goo'na*), tn., isl. of Teneriffe, Canary Islands; oranges, raisins, tobacco. Pop. 13,000.

Lahore (*la-hor'*). (1) Div. of Punjab, India; cereals, cotton, tobacco, opium. Area, 24,872 sq. m.; pop. 5,466,600. (2) Dist. of above. Area, 2,691 sq. m.; pop. 1,131,000. (3) Cap. of Punjab, on R. Ravi; railway centre; anc. Hindu temple, Mohammedan mosques, Anglican cathedral; Punjab Univ.; textiles, carpets, gold and silver wares, pottery. Pop. 282,000.

Lahr (*lär*), tn., Baden, Germany, 29 m. N. of Freiburg; tobacco, cardboard, cotton and woollen goods. Pop. 14,000.

Laibach. See **LJUBLJANA**.

Laig, par. and vil., Sutherlandshire, Scotland, at s.e. end of Loch Shin; has Pictish towers; centre for tourists and anglers. Pop. (par.) 1,050.

Lake Charles, tn., s.w. Louisiana, U.S.A.; rice mills, lumber trade, oil production; winter resort. Pop. 13,000.

Lake District, dist., Cumberland, Westmorland, and Lancashire, England; famed for beautiful lake and mountain scenery; includes Lakes Windermere, Ullswater, and Derwentwater; among mountain peaks are Scafell, Skiddaw, Helvellyn; rainfall heavy; associated with Wordsworth, Coleridge, and Southey, who are called the *Lake Poets*; tourist centre. Chief towns, Amble-

side, Bowness, Coniston, Keswick. Area, c. 700 sq. m.

Lakeland, city, Florida, U.S.A., 32 m. E. of Tampa; centre of rich agricultural dist. producing much fruit; phosphate mines; winter resort. Pop. 17,000.

Lake of the Thousand Islands. See under **ST. LAWRENCE**.

Lakewood, tn., Ohio, U.S.A.; residential suburb of Cleveland; grapes. Pop. 70,000.

Lakhimpur (*läh-ëm-poor'*), dist., e. Assam, India; in Brahmaputra valley; numerous tea gardens; coal mines and petroleum wells. Chief tn., Dibrugarh. Area, 3,757 sq. m.; pop. 588,000.

Lalín (*lā-lén'*), tn., n.w. Spain, 30 m. N.E. of Pontevedra; paper mills and tanneries. Pop. 17,000.

La Linea. See **LINEA**.

Lambayeque (*lam-bt-ä'käl*), mar. dep., N. Peru; sugar, rice, tobacco, cotton. Chief tn., Chiclayo. Area, 4,614 sq. m.; pop. 124,000.

Lambeth, metropolitan bor., s. London; opposite Westminster; contains Lambeth Palace, residence of Archbishop of Canterbury; pottery and chemicals. Pop. 296,200.

Lam'bourne, tn., Berks, England, 13 m. N.W. of Newbury; training stables for race-horses; trout fishing. Pop. 2,340.

Lamesley (*läms'li*), par. and vil., Durham, England, 3 m. s. of Gateshead; coal and iron mines; grindstone quarries; chemical works. Pop. (par.) 6,800.

Lammermoors', or **LAMMERMUR HILLS**, broad range, s.e. Scotland, in Berwickshire and E. Lothian. Highest summit, Lammer Law, 1,733 ft.

Lam'peter, munic. bor. and mkt. tn., Cardiganshire, S. Wales, on R. Teifi, 23 m. N.E. of Carmarthen; agricultural trade; contains St. David's Coll. (1827), affiliated with universities of Oxford and Cambridge. Pop. 1,700.

Lanal. See **HAWAIIAN ISLANDS**.

Lan'ark, royal burgh and co. tn., Lanarkshire, Scotland, 22 m. s.e. of

Glasgow; druggist and winey; cattle, sheep, and horse sales; rich in Wallace associations; racecourse. Pop. 6,200. New Lanark, 1 m. s., has cotton mills.

Lanarkshire, co., s.w. Scotland; surface rises from n. to Lowther Hills in s.; watered by Clyde and its tributaries. In s. are sheep farms, in centre market gardens and orchards, in n. important coalfields. Lanarkshire is most populous and busiest manufacturing county in Scotland. Iron goods, steel, machinery; contains chief seats of cotton, linen, and woollen industries; shale mines, oil-works; contains Glasgow, Hamilton, Airdrie, and other industrial centres. Co. tn., Lanark. Area, 882 sq. m.; pop. 1,586,000.

Lancashire, or LANCS, co., n.w. England; low, flat coast is much indented; many good harbours; surface rugged and mountainous in n. and e., reaching 2,633 ft. in Conistone Old Man in n.; drained by Uddon, Lune, Ribbles, Mersey, Irwell, and other rivers. Lancashire is most populous and busiest manufacturing county in England; contains large coalfield, which has become chief seat of cotton industry, with centre at Manchester. In detached portions in the n. are large deposits of iron ore which have developed great iron and steel industries at Barrow-in-Furness. Manufacture of machinery is important; other industries include shipbuilding, dye works, manufacture of chemicals, glass, soap, leather, silk and woollen textiles; oats, wheat, and potatoes are grown; cattle and sheep reared. County is crossed by numerous railways, and by several canals, including the Manchester Ship Canal. There are remains of many monasteries, the finest of which is Furness Abbey, a Cistercian foundation. Cap. Lancaster. Chief seapt., Liverpool, second seapt. in U.K. Other important tns., Manchester, Salford, Bolton, Oldham, Blackburn, Preston, Burnley, St. Helens. Area, c. 1,880 sq. m.; pop. 5,039,100.

Lancaster. (1) Co. tn., Lancashire, England; anc. castle, now used as county prison; fine old church, St. Mary's; connected with Kendal and Preston by Lancaster Canal; cabinet-making, upholstery, cottons, railway plant. Pop. 43,400. (2) Tn., s.e. Pennsylvania, U.S.A.; tobacco, cottons, silks; rich agricultural dist. Pop. 61,000. (3) Tn., Ohio, U.S.A., 28 m. s.e. of Columbus; agricultural trade; flour, shoes, glass, and machinery. Pop. 15,000.

Lancaster, par., vil., Durham, England, 7 m. n.w. of Durham; coal mines; Roman remains. Pop. (par.) 5,100.

Lanchow', cap. of Kansu, China, on R. Hwang-Ho; cloth and camel's-hair goods; centre for mineral, silk, fur, tobacco, grain, tea produce of province. Pop. c. 369,000.

Lanciano (lân-chê-d'ân), tn., Abruzzi e Molise, Italy, near Adriatic coast; seat of archbishop; grain, fruit, oil, wine; silk, linen, and hemp factories. Pop. 20,000.

Lancing, seaside resort, Sussex, England, 2½ m. w. of Shoreham; chemical works. Pop. 4,000.

Landes (lônâ), dep., s.w. France; watered by R. Adour; three-fifths of dep. is known as the *landes*, and consists of tracts of sand interspersed with marshes, and forests of cork, pine, and oak; produces resin, charcoal, rock-salt, iron; horses bred. Chief tn., Mont-de-Marson. Area, 3,604 sq. m.; pop. 263,000.

Landeshut (lân-des-hoot), tn., Silesia, Prussia, 65 m. s.w. of Breslau; textile industry and shoes. Pop. 13,000.

Landsberg - an - der - Warthe (vâr'te), tn., Brandenburg, Prussia, on Warthe R., 45 m. n.e. of Frankfurt-on-the-Oder; machinery, sawmilling, and brick making. Pop. 43,000.

Land's End, most westerly point of England, Cornwall, 9 m. s.w. of Penzance; granite cliffs, 60 ft. to 100 ft. high, fantastically eroded.

Landshut (lân'shoot), tn., Lower Bavaria, Germany, on riv. Isar, 38 m. n.e. of Munich; old castle of

Transnitz (1232); machinery, breweries, and tobacco. Pop. 26,000.

Landakrona (*lands-krö'na*), seaport, Sweden, 22 m. n. of Malmö; railway centre; tanneries, flour and sugar mills; exports butter, eggs, and bacon. Pop. 18,000.

Langenhielau (*lang-en-bē'lou*), tn., Silesia, 35 m. s.w. of Breslau; wool-lens, cottons, chemicals. Pop. 20,000.

Langholm (*lang'um*), mkt. tn., Dumfriesshire, Scotland, on R. Esk, 21 m. n.w. of Carlisle; tweeds, tanneries. Pop. 2,400.

Langreo (*lân-grā'ō*), tn., n. Spain, 10 m. s.e. of Oviedo; coal and iron; iron foundries. Pop. 34,000.

Langres (*lôn'gr*), tn., Haute-Marne, France, 20 m. s.s.e. of Chaumont; strongly fortified; cutlery; trade in grain, live-stock, and wine. Pop. 6,000.

Laos'ing, city, Michigan, U.S.A., cap. of state, 85 m. n.w. of Detroit; Michigan Agricultural Coll.; good water-power; automobiles; agricultural implements, machinery. Pop. 78,000.

Lanzarote (*lan-tha-rō'til*), most easterly of Canary Islands; volcanic and very mountainous; produces excellent grapes. Cap. Arrecife, on s.e. coast. Area, 326 sq. m.; pop. 17,000.

Laoag (*lā-o-āg'*), cap., Ilocos Norte, n.w. Luzon, Philippines, on Laoag R., 5½ m. from coast; rice, corn, tobacco, sugar, and cotton. Pop. 38,000.

Laoighise. See LEIX.

Laon (*lā-on*), chief tn., Aisne, France, 87 m. n.e. of Paris; important fortress since Roman times; fine 12th-cent. Gothic cathedral; linen and metal goods. Pop. 14,000.

Laos (*lā'os*), general name for Central Indo-China, including basin of R. Mekong and upper basin of R. Menam, Chao Bhaya, and Salween; bordering Siam and Burma on the w., Yunnan on the n., Tongking and Annam on the e., and Cambodia on the s. Divided into (1) *Eastern or French Laos*, Fr. Protectorate since 1893. Area, 82,604 sq. m.; pop. 837,000. (2) *Siamese Laos*, number of semi-independent principalities. (3) *Shan*

States of Lakon, Chiangmai, Nan, etc. Products include rice, maize, sugarcane, cotton, indigo, fruits, tobacco, teak; gold, tin, lead, and precious stones are found, but little worked; cattle raising is chief industry.

La Paz. (1) Dep., Bolivia, S. America; mountainous in s., with peaks Illimani (22,500 ft.) and Sorata (23,500 ft.); produces coca, coffee, rubber, copper, tin, gold, silver. Area, 40,686 sq. m.; pop. c. 724,000. (2) Or **LA PAZ DE AYACUCHO**, cap., Bolivia, S. America; important commercial city; trade in copper, alpaca, wool, cinchona. Pop. 142,000.

Lap'land, terr. having no political existence, largely consisting of the Arctic region of Norway, Sweden, and Finland; mainly mountain, forest, and morass; inhabitants (Lapps, so named by Swedes) are mostly nomad hunters and fishers, with large herds of domesticated reindeer. Great wealth of copper, iron ore, and timber.

La Plata, tn., cap. of Buenos Aires prov., Argentina; trades in cattle and agricultural produce; university. Pop. 166,000.

La Porte, city, n. Indiana, U.S.A.; iron and steel goods, woollen goods, and flour. Pop. 15,000.

Larache (*la-rash'*), tn., Spanish Morocco, on Atlantic coast; exports include cork, beans, wool. Pop. c. 15,000.

Lar'bert, par. and vil., Stirlingshire, Scotland, 20 m. e.n.e. of Glasgow; coal mines; rly. jn. Pop. (par.) 12,400.

Laredo (*la-rā'dō*), frontier city, Texas, U.S.A., on Rio Grande; connected by bridges with Nuevo Laredo (Mexico) on opposite bank; iron, brick, foundry and machine-shop products; wool, hides; natural gas and petroleum. Pop. 33,000 (two-thirds Mexicans).

Lar'go, UPPER and LOWER, two coast villages, 1 m. apart, and par., s.e. Fife, Scotland. Alexander Selkirk; original of 'Robinson Crusoe'; a native; statue erected in 1885. Pop. 2,400.

Largs, seaside resort, N. Ayrshire, Scotland, 4 m. S. of Wemyss Bay; here Haakon of Norway was defeated by Alexander III. (1263). Pop. 6,100.

Larissa, name of several towns in anc. Greece, most important of which is represented by modern town, on R. Salambria, 35 m. N.W. of Volo, Thessaly; many mosques; silk and cotton goods. Pop. 24,000.

Laristan, dist., Fars prov., Persia, bordering on Persian Gulf; arid and sandy waste with salt steppes; camels reared; silk manufactured. Cap. Lar, 180 m. S.E. of Shiraz. Area, c. 20,000 sq. m.

Larkana. (1) Dist., N. Sind, Bombay, on r. bk. of Indus; greater part fertile and well-watered plain; chief products, rice, wheat, cotton, wool; carpets and leather goods are manufactured. Area, 5,053 sq. m.; pop. 598,000. (2) Tn. in above, 150 m. N. of Hyderabad; neighbourhood known as 'Eden of Sind'; cotton, silk, leather, and paper. Pop. 18,000.

Larkhall, tn., Lanarkshire, Scotland, 3 m. S.E. of Hamilton; coal mines; brick and tile making industries. Pop. 14,000.

Larnaca, or LARNAKA, seaport, Cyprus, on S. coast; exports grain, cotton, fruit, gypsum. Pop. 10,000.

Larne, mkt. tn. and seaside resort, co. Antrim, N. Ireland, W. of entrance to Lough Larne; bleaching, linen and woollen weaving, paper making; bauxite exported; daily communication by mail steamer with Stranraer, Scotland (39 m.). Pop. 8,000.

La Rochelle (*lā rō-shel'*), chief port and cap., Charente-Inférieure, France, on Bay of Biscay; connected with Newfoundland fishing; shipbuilding, cotton yarn manufacture, glass works, sugar refining, and distilling; commerce chiefly centred at port of La Pallice. Pop. 38,000.

La Roche-sur-Yon (*lā rōsh-soor-yon'*), cap., Vendée, France, 48 m. S. of Nantes; market for agricultural produce, horses, and cattle; flour mills. Pop. 12,000.

Larvik. See LAURVIK.

Lashkar. See GWALIOR (2).

Las Palmas, chief tn., Grand Canary, Canary Islands, on N.E. shore; fishing; glass, hats, and leather goods; bananas, potatoes, tomatoes. Pop. 66,000.

Lasswade. See BONNYRIGG AND LASSWADE.

Latakia (*la-la-kē'a*), seaport, Beirut, Syria; exports sponges, olive oil, and famous Latakia tobacco. Pop. c. 22,000.

La Tuque (*lā-took'*), tn., Quebec, Canada, on St. Maurice R., 78 m. N. of Three Rivers. Pop. 6,000.

Latvia, rep., E. and S. of Gulf of Riga; bounded N. by Estonia, E. by Russia, S. by Lithuania, and W. by Baltic Sea. Surface generally plain, with marshy or sandy areas; chief riv. S. Dvina, flowing into Gulf of Riga; over 1,000 lakes. Pine forests cover c. one-third of surface. Agriculture is principal occupation; chief crops, rye, barley, oats, and flax; stock raising is important; some dairy farming and gardening. Textiles, flour, paper, oil, sawmills, distilleries, sugar refineries, leather and linseed industries. Principal ports, Riga (cap.), Ventspils, and Liepaja. Area, c. 25,000 sq. m.; pop. 1,895,000.

Lauder, royal burgh, Berwickshire, Scotland, on riv. Leader, 29 m. S.E. of Edinburgh; favourites of James III. hanged over bridge (1483). Pop. 600.

Launenburg (*lōn-en-boorg*), tn., Pomerania, Prussia, 38 m. W.N.W. of Danzig; woollens, linen, leather, machinery. Pop. 15,000.

Launceston (*lōns'tun*). (1) Mkt. tn. and munic. bor., Cornwall, England, 22 m. N.W. of Plymouth; ruined castle; several times besieged during Civil War. Pop. 4,100. (2) Chief tn., N. Tasmania; sawmilling, iron and engineering works. Pop. (with suburbs), 29,000.

La Union (*lā oo-nē-ōn'*), tn., Murcia, Spain, 5 m. E. of Cartagena; iron, lead, sulphur, and manganese mines. Pop. 25,000.

Laur'eneokirk, mkt. tn., Kincardineshire, Scotland, 30½ m. s.w. of Aberdeen; makes handloom linens; carriage building. Pop. 1,300.

Lauren'tide Mountains, name sometimes applied to s. escarpment of Laurentian Plateau or Canadian Shield, Canada; many waterfalls; forested.

Laurvik (*lour'vik*), or **LARVIK**, seapt. and spa, Norway, 100 m. s.w. of Oslo; shipbuilding, glass works; saw and pulp mills; exports timber, ice, wood pulp, and granite. Pop. 11,000.

Lausanne (*lô-zan'*), cap., Vaud, Switzerland; half a mile from Ouchy, its port on n. shore of Lake Geneva; cathedral (1235-75); univ. and educational centre; rly. jn.; on Simplon route between Paris and Milan; machinery, tobacco, and chocolate; vineyards. Pop. 78,000.

Lauterbrunnen (*lou-ter-broon'en*), tourist resort, Bernese Oberland, Switzerland, 6 m. s.e. of Interlaken, on White Lütschine; most famous of its waterfalls, Staubbach, 980 ft. high; mountain railway to Grindelwald by Wengernalp; funicular and electric railway to Mürren.

Lauson (*lô-zôn'*), tn., Quebec, Canada, on s. shore of R. St. Lawrence, 3½ m. e. of Quebec. Pop. 6,000.

Laval, cap., Mayenne, France, 45 m. e. of Rennes; 12th cent. Gothic cathedral; anc. ducal château; manufacture of cotton goods, paper, leather, and machinery; marble quarries in vicinity. Pop. 24,000.

Law'rence. (1) City, Massachusetts, U.S.A., on the Merrimac R., 26 m. n.w. of Boston; cotton and woollen and worsted goods; foundry and machine shop products. Pop. 85,000. (2) City, Kansas, U.S.A., 38 m. w. of Kansas City; state univ.; flour, paper, machinery, nails. Pop. 12,400.

Leadgate, urb. dist., Durham, England, 9 m. w. of Chester-le-Street; coal mining. Pop. 6,400.

Lead hills, vil., Lanarkshire, Scotland, near border of Dumfries; silver-lead mines; birthplace of Allan Ramsay; alt. 1,301 ft. Pop. 815.

Leamington (*lem'ing-ton*). (1) Or **ROYAL LEAMINGTON SPA**, munic. bor. and health resort, Warwickshire, England, 2 m. e. of Warwick; mineral waters. Pop. 29,700. (2) Tn., Ontario, Canada, on L. Erie, 30 m. s.e. of Windsor. Pop. 5,000.

Leatherhead, tn., Surrey, England, 12 m. s.w. of Croydon; brick and tile works, breweries, and tanneries. Pop. 6,900.

Leavenworth, city, Kansas, U.S.A., 25 m. n.w. of Kansas City; coal mining; bricks, stoves, furniture, machines, flour. Pop. 21,000.

Leb'anon ('white'). (1) Two parallel mountain ranges, Syria; mts. composed of white chalk and limestone rock. Ranges are: Lebanon on w., reaching an extreme elevation of 10,018 ft.; and Anti-Lebanon on e., with outlying Mt. Hermon (c. 9,300 ft.). Between ranges stretches plain drained by Rs. Litany and El-Asi (the ancient Leontes and Orontes). Cedars of Lebanon now found only in certain districts. Vines, olives, mulberries grow in lower regions; cereals, tobacco, silk, honey, coal. Greater Lebanon, extending to frontiers of Palestine, is a state under French Mandate. Cap. Beirut. Pop. 796,000. (2) City, Pennsylvania, U.S.A., 85 m. n.w. of Philadelphia; iron mining; machinery and brick making. Pop. 26,000.

Lebrija (*le-brí'ha*), or **LEBRİKA**, tn., Seville, Spain, 34 m. s. of Seville; grain, oil, wine, and cattle; ruined castle. Pop. 12,000.

Le Cateau (*le cá-tô*), formerly **CATEAU-CAMBRÉSIS**, tn., Nord, France, 16 m. e.s.e. of Cambrai; textiles; sugar refining, brewing, metal founding, and mosaic work. Scene of much fighting during Great War. Pop. 8,000.

Lecce (*let'chá*), chief tn., prov. Lecce, Apulia, Italy, 23 m. s.e. of Brindisi; ruined fortifications; dist. produces fruit and grain; castle of San Cataldo in vicinity. Pop. 39,000.

Lecce (*lek'ô*), city, prov. Como, Lombardy, Italy, on s.e. arm (Lake Lecco) of Lake Como; iron, copper, silk, and cotton. Pop. 29,000.

Ledbury, mkt. tn., Herefordshire, England, on Malvern Hills, 13 m. E. of Hereford; cider orchards and hop gardens. Pop. 3,300.

Leeds, city and co. bor., W. Riding of Yorkshire, England, on R. Aire; canal communication with Humber and with Liverpool; univ., founded 1904, includes textile and art departments; famed for triennial musical festivals; chief centre of woollen industry; locomotives, machinery, heavy iron and steel goods of all kinds, chemicals, glass, printing, leather goods, artificial silk and pottery; Kirkstall Abbey, 2½ m. distant, belongs to corporation. Pop. 482,800.

Leek, tn., Staffordshire, England, 10 m. N.E. of Hanley; manufactures silk, artificial silk, braids, laces, and covered buttons; charter dates from 1208. Pop. 18,600.

Lee-on-the-Solent, wat.-pl., Hants, England, on Southampton Water, 3 m. W. of Gosport. Pop. 4,000.

Leeuwarden (*lū'oo-war-den*), tn., Friesland, Holland, 26 m. W. of Gröningen; dairy and agricultural produce; iron, copper, and lead goods, musical instruments, boats. Pop. 47,000.

Leeward Islands, chain of islands, Lesser Antilles, W. Indies. Those belonging to Britain are Dominica, Antigua (including Barbuda and Redonda), St. Kitts (with Nevis and Anguilla), Montserrat, and the Virgin Islands. St. Thomas, Santa Cruz, and St. John in the Virgin Islands belong to U.S.A. Others of the group are owned by Holland and France, Guadeloupe being largest French possession in W. Indies. Islands volcanic with lofty peaks, highest Morne Diablotin (4,746 ft.) in Dominica. Produce sugar and molasses, cotton, citrate of lime, cacao; lime juice exported from Montserrat and Dominica. Area (of Brit. Islands), 715 sq. m.; pop. 122,000.

Legaspi. See ALBAY.

Leg'horn (Ital. *Livorno*), seaport, Tuscany, W. coast of Italy; exports hemp, hides, marble, olive oil, candied

fruit, wine, soap, boracic acid, and hats; shipbuilding, glass making, and copper and brass founding are carried on; fine cathedral. Pop. 129,000.

Legnago (*len-yá'gō*), tn., Lombardy, Italy, on R. Adige, 25 m. S.E. of Verona; one of the four fortresses of the 'Quadrilateral'; centre of fertile dist.; rice, cereals, and sugar. Pop. 19,000.

Legnano (*len-yá'no*), tn., Lombardy, Italy, 17 m. N.W. of Milan; cotton, silk, thread, and machinery. Pop. 27,000.

Leh (*lā*), cap. of Ladakh, Kashmir, India, 5 m. from r. bk. of Upper Indus; in open valley, alt. 11,500 ft.; starting-place for caravans into central Asia; commands entrances to passes N. and E.; headquarters of Brit. political officer. Pop. 2,000.

Lehe. See WESERMÜNDE.

Leicester (*les'er*), co. tn., Leicestershire, England; manufactures hosiery, boots and shoes, elastic web, and agricultural implements. Pop. 239,100.

Leicestershire, inland co., Midlands, England, of varied surface, rugged in Wolds (N.E.) and in Charnwood Forest (long deforested), where Bandon Hill rises to 912 ft. Chief rivers: Soar; Trent in N.W., and Avon and Welland in S.E. Cattle and sheep are reared; long noted for wool and Stilton cheese; oats, wheat, turnips, and mangolds are principal crops. Coal and iron largely worked, former in N.W.; granite and slate quarried in Charnwood. Manufactures include hosiery (Leicester, Loughborough, Hinckley), boots and shoes, silk plush, elastic web, bricks and pottery. Melton Mowbray, Market Harborough, and Loughborough are hunting centres. Co. tn., Leicester. Area, 830 sq. m.; pop. 541,800.

Leigh (*lē*), mkt. tn. and munic. bor., Lancs, England, 7 m. S.E. of Wigan; coal mining; cotton and silk; brewing; agricultural implements and iron foundries. Pop. 45,300.

Leighton Buzzard (*lū'ton*), urb. dist., Bedfordshire, England, 40 m. N.W. of London; has fine Early Eng. church;

agricultural trade and market gardening; paper making. Pop. 7,000.

Leinster (*len'ster*), or LAIGHEN, S.E. prov., I.F.S., extending from Dundalk Bay to Waterford Harbour. Other inlets: Dublin Bay and Wexford Harbour. Comprises twelve counties: Louth, Meath, Dublin, Wicklow, and Wexford, on the coast; Kilkenny, Carlow, Kildare, Leix, Offaly, Westmeath, and Longford, inland. Area, 7,580 sq. m.; pop. 1,149,100.

Leipzig (*lip'sig*), city, Saxony, Germany, on fertile plain at junction of Rs. Elster, Pleisse, and Parde. The ancient town (now business section) is separated from extensive suburbs by fine promenades, built on site of old fortifications. Seat of Supreme Court of Justice of Germany. Ranks among first cities in the world in bookselling, publishing, typefounding, and music; European fur market: also important in metal and textile industries, and manufacture of chemicals, scientific instruments, leather, rubber, foodstuffs; famous fairs held Easter, Michaelmas, and New Year since Middle Ages. Pop. 679,000.

Leiston (*la'ston*), or LEISTON CUM SIZEWELL, urb. dist., Suffolk, England, 22 m. N.E. of Ipswich; ironworks; agricultural machinery and implements. Pop. 4,200.

Leith. See EDINBURGH.

Leitmeritz. See LITOMERICE.

Leitrim (*li'trim*), mar. co., prov. Connaught, I.F.S., with coast on Donegal Bay; almost cut in two by Lough Allen. N. generally mountainous, with fertile valleys. E. of Lough Allen is another mountainous tract. S. more open and better suited for cultivation. R. Shannon enters county N. of Lough Allen and partly forms S.W. boundary. Many lakes. Fodder crops, oats, and potatoes: coal is worked: iron, lead, limestone, and marl occur. Co. tn., Carrick-on-Shannon. Area, 613 sq. m.; pop. 63,500.

Leix, or LAOIGHIS (*lēs*), formerly QUEEN'S COUNTY, co., Leinster, I.F.S. In N.W. are Slieve Bloom Mts.,

in S. and S.E. are various scattered ranges of hills; centre is mainly flat. Principal rivers are Nore and Barrow. Agriculture and dairy farming are chief industries. Coal occurs in S. Chief towns, Maryborough (co. tn.), Mountmellick. Area, 664 sq. m.; pop. 51,000.

Leman, LAKE. See GENEVA (3).

Lemberg. See Lwow.

Lem'nos, or LIMNOS, one of the largest islands in N. Aegean Sea, about 40 m. W. of entrance to Dardanelles; largely mountainous; grain, tobacco, and fruits. Chief port, Kastro or Lemnos, on W. coast. Area, c. 150 sq. m.; pop. c. 4,000.

Le'na, riv. of Siberia, with drainage area of c. 1,000,000 sq. m.; length, 2,900 m.; rises in Baikal Mts. W. of Lake Baikal; reaches Arctic Ocean through large delta. Chief tribs.: (r. bk.) Vitim (1,200 m.), Olekma (1,100 m.), Aldan (1,300 m.); (l. bk.) Vilui (1,500 m.); sands of first two contain gold. Total length of navigable waterways, 7,110 m.

Leninakan', formerly ALEXANDROPOL, fortified tn., Erivan dist., Armenia, U.S.S.R.; important silk trade. Pop. c. 50,000.

Len'ingrad, originally ST. PETERSBURG, and later PETROGRAD, former cap. of Russia, and second city of U.S.S.R., at mouth of R. Neva where it enters Gulf of Finland; only outlet to Baltic remaining to Russia: climate severe, R. Neva being frozen from November to April. Many magnificent palaces. State Library ranks after those of London and Paris. There are many important educational institutions, particularly the Leningrad State University. There are thirteen cathedral churches, the most sumptuous being that of St. Isaac with its beautiful gilded dome. Industrial establishments include metal works, iron foundries, sugar refineries, distilleries, breweries, shipbuilding yards, and printing works; chemicals, tobacco, soap, crystal and glass, cotton and cloth, leather, cordage, pottery, porcelain, and machinery are

also made. City is connected by riv., lake, and canal with Rs. Volga and Dnieper, and so with Caspian and Black Seas. Pop. 1,614,000.

Len'nep, tn., Rhineland, Prussia, 8 m. s.e. of Elberfeld; machinery, woollens, cottons, and silk. Pop. 14,000.

Lens, town, Pas-de-Calais, France, 10 m. n.e. of Arras; is in rich coal-field; suffered almost total destruction during Great War; iron and steel works, sugar, soap, and wire-rope factories. Pop. 30,000.

Lentini (*len-tē'nō*), anc. LEONTINI, tn., Sicily, 16 m. s.w. of Catania; founded by Greek colonists (730 B.C.); trades in oil, wine, cereals. Pop. c. 26,000.

Leominster. (1) (*lem'ster*) Tn., N. Herefordshire, England; par. church partly Norman; tn. dates from 658; agricultural implement works; cider and hops. Pop. 5,700. (2) (*lem'in-ster*) Tn., Massachusetts, U.S.A., 40 m. n.w. of Boston; pianos, combs, paper, jewellery. Pop. 22,000.

Leon (*lā-on*). (1) Prov., N.W. Spain, bounded on N. by Cantabrian Mts.; mountainous in N. and W.; wheat, rye, oats, barley, and maize largely cultivated; cattle, mules, coal, iron, and leather are exported. Area, 5,936 sq. m.; pop. 419,000. (2) Cap. of above, on fertile plain; fine Gothic cathedral; Byzantine church of St. Isidore; parts of Roman wall still exist. Pop. 21,000. (3) Tn., Nicaragua, Central America, on fine plain near Pacific coast; cathedral, univ., and bishop's palace; manufactures cotton and woollen goods, and boots and shoes. Pop. 23,000. (4) Tn., Guanajuato, central Mexico; gold and silver; leather, cotton, and woollen goods. Pop. 33,000.

Leonforte (*lā-on-for'tā*), walled tn., Sicily, 49 m. W. by N. of Catania; trade in sulphur, cattle, wine, and oil. Pop. 20,000.

Leopoldville, cap., Belgian Congo, Africa, on R. Congo, at entrance to Stanley Pool; station for organized steam transport on Upper Congo;

connected with Matadi by railway (250 m.) to avoid cataracts. Pop. c. 6,000.

Le Puy (*le pwe*), or LE PUY-EN-VELAY, cap. of Haute-Loire, France, 90 m. s.e. of Lyons; 12th cent. Romanesque cathedral; thread and guipure lace. Pop. 16,000.

Lérida (*ler'è-dā*). (1) Prov., N. Spain; northern half mountainous, watered by Segre, trib. of Ebro; chief prods. are wine, oil, wool, timber, and livestock. Area, 4,690 sq. m.; pop. 315,000. (2) Cap. of above, on R. Segre, 80 m. W. by N. of Barcelona; leather, paper, glass, and woollen, cotton, and silk goods. Pop. 38,000.

Ler'wick, cap. of Shetland Islands, Scotland, on Bressay Sound, E. coast of Mainland, 110 m. N.N.E. of Kirkwall, Orkney; important herring-fishing station; exports fish, ponies, sheep, cattle, and knitted goods. Pop. 4,200.

Les Andelys (*lās on-dlē*), tn., Eure, France, 30 m. s.e. of Rouen; includes Grand and Petit Andely; site of former fortress; large trade in grain, flour, cattle, and leather. Pop. 4,000.

Les'bos, or MYTILENE, Greek isl. in Aegean Sea; early settled by Aeolian Greeks. Birthplace of anc. Greek poetess Sappho; Turkish from 1462 to 1912. Surface hilly, rising to over 3,000 ft.; upper districts wooded; lower ground produces olives, grapes, figs. Chief tn. Mytilene (pop. 28,000). Area, 675 sq. m.; pop. 161,000.

Leskovac (*les'hō-vats*), tn., Yugoslavia, on R. Morava, 22 m. S. of Nish; trade in hemp and cloth. Pop. 14,000.

Les'lie, tn., Fife, Scotland, on R. Leven, 12 m. s.w. of Cupar; paper and flax mills; manufacture of fountain pens. Pop. 2,500.

Lesmahagow (*les-ma-hā'gō*), par. and vil., Lanarkshire, Scotland, 5 m. s.w. of Lanark; coal mining; fruit. Pop. (par.) 12,900.

Les Sables d'Olonne. See SABLES D'OLONNE.

Lesuto. See BASUTOLAND.

Leszno (*lesh'nō*), formerly LISSA, tn., Poland, 40 m. s.w. of Poznan;

manufactures machinery, shoes, and tobacco. Pop. 16,000.

Letchworth, garden city, Herts, England, 2 m. N.E. of Hitchin; planned so that not more than twelve houses are built to the acre, and theoretically limited to 35,000 inhabitants; founded 1903. Pop. 14,500.

Lethbridge, tn., Alberta, Canada, 95 m. S.E. of Calgary; coal-mining centre. Pop. 11,000.

Le Tréport (*le tri-por'*), seapt., Seine-Inférieure, N. France, 15 m. E.N.E. of Dieppe; watering-place; fisheries, shipbuilding, and glass making. Pop. 5,000.

Letterkenny, mkt. tn., co. Donegal, I.F.S., 17 m. W. by S. of Londonderry; grain, flax, and rope making. Pop. 2,300.

Leuchars (*looch'ars*), par., vil., and rly. jn., Fife, Scotland, 5 m. N.W. of St. Andrews; has 12th cent. Norman church; air station. Pop. (par.) 2,800.

Levant', eastern end and shores of Mediterranean. Greece, Egypt, Asia Minor, Syria, and Palestine lie around Levant.

Le'ven. (1) Coast tn., E. Fife, Scotland; golf links; flax spinning, linen weaving, seed crushing, and coal mining. Pop. 7,400. (2) Loch, lake, Kinross-shire, Scotland; area, c. 5½ sq. m.; famous for trout; has seven islands, including Castle Island, on which are ruins of Queen Mary's place of imprisonment (1567-68).

Le'ver, LITTLE, urb. dist., Lancashire, England, c. 2 m. S.E. of Bolton; coal mining; cotton mills and paper and chemical works. Pop. 4,900.

Levis (*lā'vè* or *lev'is*), or POINT LEVIS, tn., Quebec, Canada, on r. bk. of St. Lawrence, opposite Quebec; has graving dock and extensive wharves; important centre of river trade. Pop. 10,500.

Levkosia. See NICOSIA (1).

Lewes (*loo'is*), co. tn., Sussex, England; trades in wool, sheep, cattle, and farm produce. In battle of Lewes (1264) Henry III. was defeated by Simon de Montfort. Pop. 10,800.

Lewis. See LEWIS-WITH-HARRIS.

Lew'isham, suburb (parl. and metropolitan bor.) of London, 4 m. S.E. of St. Paul's; includes part of Blackheath and Sydenham. Pop. 219,900.

Lewiston. (1) City, Maine, U.S.A., 25 m. N. of Portland, on Androscoggin R., at the falls, which supply water-power; cottons, wools, machinery, and foundry and lumber products. Pop. 35,000. (2) Tn., N. Idaho, U.S.A., on Snake R.; mining centre; exports fruit, grain, timber, and livestock. Pop. 6,000.

Lewis-with-Harris, or 'THE LEWS,' largest and most northerly of Outer Hebrides, Scotland; consists of two parts: Lewis to the N. (area, 575 sq. m.), part of Ross-shire, and Harris to the S. (area, 195 sq. m.), part of Inverness-shire. General surface of Lewis is flat, greater portion unproductive moorland; Harris mostly mountainous; chief industry fishing; noted for Harris tweed, made by the cottars. At Callernish, in W. Lewis, is the most perfect Druidical stone circle in Brit. Isles. Stornoway, chief tn. of Lewis, is headquarters of a fishing fleet. Pop., Lewis, 28,400; Harris, 5,300.

Lex'ington. (1) City, Kentucky, U.S.A., 75 m. S. of Cincinnati; agricultural industries; in centre of 'blue grass country,' famed for horses and cattle; race-horses bred; tobacco; univ. Pop. 46,000. (2) Tn., Massachusetts, U.S.A., 11 m. N.W. of Boston; trade in agricultural products; scene of first bloodshed (1775) in American War of Independence. Pop. 8,000.

Leyden (*lī'den*), or LEIDEN, tn., S. Holland, Netherlands, on Old Rhine, 9 m. N.E. of the Hague; seat of famous univ. (1575); manufactures woollens, linen, leather; printing an important industry. Famous siege by Spaniards (1573-74). Pop. 70,000.

Leyland, urb. dist., Lancs, England, 5 m. S. of Preston; cotton mills and bleach works. Pop. 10,600.

Leyton, urb. dist., Essex, England, on Lea, 8 m. W. of Romford, N.E. suburb of London; Roman remains. Pop. 128,300.

Lhasa (*las'a*), cap., Tibet; name means 'Abode of the Gods'; sacred city of Buddhists; on fertile plain about 12,000 ft. above sea-level; encircled by mountains. Long known as the 'Forbidden City.' Principal building is the Potala, residence of Dalai Lama. The great temple, or Jokhang, contains many sacred shrines, one of which holds life-size image of Buddha. The Ramo-ché is also a celebrated temple. There are also many monasteries. Meeting-place of caravans from India, China, and Turkistan; trades in tea, silk, carpets, gold, lace, gums, porcelain, musk, rice, tobacco. Pop. c. 20,000.

Liaoning, formerly FENGTIEN, or SHENG KING, southmost prov., Manchuria. E. portion is richly wooded and contains valuable coal deposits; w. is very fertile. Cap. Mukden. Area, 56,000 sq. m.; pop. (est.) 15,000,000.

Liao-yang', city, Liaoning, Manchuria, on railway from Mukden to Port Arthur; scene of great Russian defeat in war with Japan (1904); in rich cotton dist. Pop. (est.) 100,000.

Litau. See LIEPAJA.

Liberac (*lib'er-ets*), formerly REICHENBERG, tn., Bohemia, Czechoslovakia, on R. Neisse, 87 m. N.N.E. of Prague; woollen and cotton cloth. Pop. 35,000.

Libéria, independent Negro republic, w. Africa, extending S.E. of Sierra Leone for 350 m. along coast to French Ivory Coast, and claiming the country for c. 150 m. inland. Was established as home for freed U.S.A. slaves in 1822. Coast is low and swampy; interior rises, and has excellent timber; watered by R. Kavaalli and other streams; soil very fertile; produces coffee, palm oil and kernels, rubber, cocoa, hides, kola nuts. Iron is widely distributed and is worked. Interior little developed and in parts unexplored. Inhabitants all Negroes, mostly Christians. Cap. Monrovia. Area, c. 43,000 sq. m.; pop. (est.) 2,000,000-2,500,000.

Libertad', mar. dep., N.W. Peru, between Pacific on w. and dep. of Loreto on E.; mahogany, hides, cattle,

rice, sugar, cotton, coffee, and cocoa; silver and copper are mined. Cap. Trujillo. Area, 10,206 sq. m.; pop. c. 380,000.

Liberty Island. See BEDLOE'S ISLAND.

Libourne (*li-boorn'*), riv. port, Gironde, France, on R. Dordogne, 20 m. N.E. of Bordeaux; brandy, sugar, and woollen goods; vineyards. Pop. 14,000.

Libreville (*li-br-vil'*), cap. of Gabon Colony, French Equatorial Africa; important seaport and coaling station. Pop. c. 2,000.

Libya (*lib'i-a*). (1) Anc. name for N. Africa; in Roman times applied to Libyan Desert, lying w. of the Nile; immense stony plateau (alt. 600-1,000 ft.); depressions contain oases of Kharga, Dakhla, Farafra, Bahariya, and Siwa; on w. merges into Sahara. (2) ITALIAN LIBYA, formerly TRIPOLI, lies between Egypt on E. and Tunis and Algeria on W. Divided into districts of Tripolitania and Cyrenaica. See TRIPOLITANIA, CYRENAICA.

Licat'a, or ALICATA, port, Sicily, 24 m. S.E. of Girgenti; exports sulphur; good harbour. Pop. 25,500.

Lich'field, munic. bor., Staffs, England; cathedral dating from 12th to 15th cent.; birthplace of Dr. Samuel Johnson; brewing. Pop. 8,500.

Lid'desdale, valley of Liddel Water, which flows through Roxburghshire, Scotland, to join R. Esk.

Lido (*li'do*), chain of sandy islets, Italy, separating lagoons of Venice from Adriatic.

Liechtenstein (*lièh-ten-stin*), PRINCIPALITY OF, independent state, between Switzerland and Austria, some 20 m. S. of L. Constance; mountainous (Rhetian Alps); corn, vines, fruits, flax; no taxation or military service. Chief tn., Vaduz. Area, 65 sq. m.; pop. 11,000.

Liège (*li-èzh'*), fortified tn., Belgium, on R. Meuse, 35 m. S.E. of Brussels; old town on hills on l. bk., new town on r. bk.; coal mining; important manufacturing city; the Belgian Birmingham; firearms, cannon, hard-

ware, zinc, motor-cars, machinery, watches, linen, woollens. During Great War taken by Germans after ten days' siege (Aug. 16, 1914). Pop. 170,000.

Liegnitz (*lĕg'nĕts*), tn., Silesia, Germany, 40 m. W.N.W. of Breslau; cloth, machinery, shoes, pianos, tobacco, oil, and pottery. Pop. 73,500.

Liepāja (*lyā'pā-yā*), formerly **LİBAU**, port, Latvia, Europe, 120 m. W.S.W. of Riga; generally ice-free; coaling and oil station; exp. grain, timber, flax and linseed, dairy produce, hides and skins. Pop. 61,000.

Lierre (*lĕ-er'*), tn., Belgium, 9 m. S.E. of Antwerp; silks, boots and shoes, cutlery, lace, and sugar. Pop. 27,000.

Liévin (*lĕ-ā-vĭn'*), tn., Pas-de-Calais, France, 1½ m. W. of Lens; coal mines. Pop. 25,000.

Liffey, riv., Leinster, I.F.S.; flows in an arc from Wicklow Mts. to Dublin Bay; chief tn. on bank, Dublin. Length, 70 m.

Ligny (*lĕn-yĕ'*), vil., Belgium, 13 m. W. of Namur; here Blücher was defeated by Napoleon (June 16, 1815). Pop. 2,000.

Liguria, dep., N.W. Italy; comprises Genoa, Imperia, Savona, and Spezia provs.; surface mountainous; coast known as Riviera. Area, 2,097 sq. m.; pop. 1,434,000.

Lille (*lĕl*), cap., Nord dep., France, near Belgian frontier; fortress; rly. jn.; important centre of iron trade; manufactures linens, cottons, damask, tulle; sugar, soap, tobacco factories; dye works, chemical works, printing establishments, and distilleries; univ.; captured and occupied by the Germans (Oct. 7, 1914–Oct. 17, 1918). Pop. 202,000.

Lima (*lĕ'mā*). (1) Maritime dep., Peru, S. America. Area, 15,048 sq. m.; pop. 550,000. (2) Cap. of Peru; contains tomb of Pizarro, who founded city in 1535; iron and copper works; textiles; manufactures gold lace, silver ware, stamped leather, glass, furniture; frequently suffers from earthquakes. Pop. 265,000. (3) City,

Ohio, U.S.A., 90 m. N. of Cincinnati; oil refineries, railway shops. Pop. 42,000.

Limassol (*lĕ-mās-sol'*), port, S. Cyprus; exp. carobs, grapes, raisins, wine; salt obtained from lakes in vicinity. Pop. 13,500.

Limavady, mkt. tn., N. Londonderry, N. Ireland; maize and oat milling, linen weaving. Pop. 2,800.

Limbach, tn., Saxony, Germany, 6 m. W.N.W. of Chemnitz; woollen, silk, and cotton goods; sewing machines; dyeing and bleaching works; serpentine quarried. Pop. 17,000.

Limbours (*lĕn-boor'*), prov., Belgium; flat, infertile in N.W.; E. produces beetroot, sugar, iron, coal. Cap. Hasselt. Area, 930 sq. m.; pop. 358,500.

Limburg (*lĕm'boorg*), prov., Holland; drained by R. Maas (Meuse); agriculture; famous for cattle; coal mines. Cap. Maastricht. Area, 847 sq. m.; pop. 531,500.

Limerick (**LUMNEACH**). (1) Co., W. Munster, I.F.S.; surface undulating; hills on W. and S.; watered by R. Shannon; live-stock raised; dairy farming; includes part of fertile Golden Vale. Area, c. 1,034 sq. m.; pop. 101,000. (2) Cap. of above, at head of estuary of R. Shannon; near hydro-electric station; important port; exp. fish and agricultural produce; headquarters of salmon fisheries; lace manufacture, bacon curing, flour milling. Pop. 39,500.

Limoges (*lĕ-môch'*), tn., cap., Haute-Vienne, France, c. 110 m. N.E. of Bordeaux; principal seat of porcelain manufacture; textile and paper industries. Pop. 98,500.

Limon (*lĕ-mon'*), or **PORT LIMON**, port, Costa Rica, Central America, on Caribbean Sea; exp. bananas. Pop. 16,000.

Limpopo, riv., S.E. Africa; rises in hills S.W. of Pretoria; flows in curve between Transvaal and Rhodesia; crosses Portuguese E. Africa, and discharges into Indian Ocean, N.E. of Delagoa Bay; navigable c. 100 m.; length, c. 1,000 m.

Linar'ea, tn., Jaen, Spain, 70 m. N. of Granada; silver-lead mining; manufactures sheet lead, pipes, and dynamite. Pop. 40,500.

Lincoln (*link'on*). (1) Co. tn., Lincs, England, on R. Witham; important rly. centre; has canal communication with Nottingham, the Humber, Boston, and the Wash; manufactures agricultural implements; trade in corn and wool; great horse fair annually; magnificent cruciform cathedral dating from Norman times. Pop. 66,300. (2) City, Illinois, U.S.A., 28 m. N.E. of Springfield; coal and grain. Pop. 12,000. (3) Cap., Nebraska, U.S.A., 55 m. S.W. of Omaha; rly. centre; flour mills, meat-packing factories. Pop. 76,000.

Lincolnshire, E. coast co., England; surface largely low wolds and fens; drained by Rs. Trent, Witham, Welland; co. divided for administrative purposes into three dists., called Parts of Holland, Parts of Kesteven, Parts of Lindsey; soil fertile; produces barley, wheat, turnips, and other crops; horses, sheep, and cattle raised in large numbers; iron ore, limestone, freestone, gypsum occur; important fisheries along coast. Largest tns., Grimsby, Lincoln (cap.). Area, 2,646 sq. m.; pop. 624,600.

Lindau (*lin'dou*), tn., Bavaria, Germany, at S.E. of L. Constance; pleasure resort. Pop. 14,000.

Lin'den, tn., Hanover, Prussia, adjoins tn. of Hanover; machinery, textiles, carpets, chemicals, rubber goods. Pop. 82,500.

Lind'field, par. and vil., Sussex, England, 13 m. N. of Brighton; picturesque old wooden houses; brick and tile making. Pop. (par.) 3,000.

Lin'dist'arne. See HOLY ISLAND.

Lind'say, tn., Ontario, Canada, 70 m. N.E. of Toronto; lumber, grain; saw and flour mills; agricultural machinery. Pop. 8,000.

Lind'sey, PARTS OF. See LINCOLNSHIRE.

Linea (*lě'nā-d*), or LA LINEA, tn., Cadiz, Spain, between Gibraltar and

San Roque; supplies Gibraltar with vegetables and fruit. Pop. 63,500.

Lingayen (*lěn-gā-yen'*), tn., Luzon, Philippines, on Lingayen Bay; rice, fisheries; health resort. Pop. 23,000.

Ling'eh. See BANDER LINGEH.

Ling'field, par. and vil., Surrey, England, in S.E. of co., on head-stream of R. Medway; Roman remains; racecourse; trout fishing. Pop. (par.) 4,905.

Linguaglossa (*lěn-guā-glos'sā*), tn., Catania, Sicily, on N.E. slope of Mt. Etna; sulphur. Pop. 15,000.

Linköping (*lěn'chō-ping*), tn., S.E. Sweden, 25 m. S.W. of Norrköping; episc. see; tobacco, cloth, bosiers. Pop. 29,500.

Linlith'gow (*lin-lith'gō*), anc. royal burgh, co. tn., W. Lothian, Scotland; ruined royal palace, birthplace of Mary Queen of Scots; paper, soap; tanning, brewing. Pop. 3,700.

Linlith'gowshire. See WEST LOTHIAN.

Linnhe (*līn'e*), LOCH, sea-loch, Argyll and Inverness shires, Scotland; extends 21 m. N.E. from junction of Firth of Lorne and Sound of Mull to Fort William.

Linth'waite, urb. dist., W. Riding, Yorks, England, partly in Huddersfield; woollen goods; stone quarries. Pop. 9,700.

Līns (*līns*), riv. port, Upper Austria, on R. Danube; rly. jn.; boat building; iron and textile industries. Pop. 102,000.

Līpa (*lě'pā*), tn., Luzon, Philippines, 90 m. S. of Manila; sugar, tobacco, maize, and cocoa. Pop. 47,000.

Lipari Islands (*lěp'ā-rē*), group of volcanic islands, Mediterranean Sea, N. of Sicily; most important are Lipari and Stromboli; former exports pumice-stone; Stromboli has constantly active volcano (3,155 ft.); grapes, figs, olives, wine, currants; sulphur and salt mines; fisheries. Pop. 21,000.

Lip'etak, tn., S. Russia, on Voronezh trib. of R. Don; mart for live-stock, timber, honey; flour mills, tanneries. Pop. 21,000.

Lippe (*lîp'e*), rep., Germany, in basin of R. Weser; surface generally mountainous; well wooded; chief industry is agriculture; horses, cattle, and pigs reared; manufactures meerschau pipes, tobacco. Cap. Detmold. Area, 469 sq. m.; pop. 164,000.

Lipp'stadt, tn., Westphalia, Germany, on R. Lippe, trib. of R. Rhine; tobacco, agricultural implements, tiles, ropes, brandy. Pop. 18,500.

Lis'bon, or **Lis'boa**, cap., Portugal, on estuary of R. Tagus; cathedral built c. 1150, twice restored; fine aqueduct; strongly fortified; one of finest harbours in Europe; exports wines, fruits, cork, oil, salt, leather, wool, cattle, pit-props, tinned fish; manufactures gold and silver ware, tobacco, textiles, chemicals; almost entirely destroyed by earthquake (1755). Pop. 530,000.

Lis'burn, tn., Antrim, N. Ireland, on R. Lagan; linen and damask manufactures; bleaching and dye works; corn mills. Pop. 12,400.

Lisieux (*lîs-yoo'*), tn., Calvados, N. France, 25 m. E. of Caen; textiles, dairy produce, boots and shoes, machinery. Pop. 15,000.

Liskeard (*lîs'hârd*), mkt. tn., E. Cornwall, England; woollens, iron goods; granite quarries. Pop. 4,300.

Lismore. (1) Tn., Waterford, I.F.S., on R. Blackwater; cathedral dates from 12th cent.; angling centre. Pop. 1,400. (2) Isl., entrance to Loch Linnhe, Scotland, 9½ m. long; fertile soil; oats, potatoes; exports lime. Pop. 350. (3) Tn., N.E. New South Wales, Australia; sugar refineries, sawmills, creameries. Pop. 9,500.

Liss, par. and vil., Hants, England, 17½ m. E. of Winchester; military camps in vicinity. Pop. (par.) 2,322.

Lis'sa. (1) Isl. See Vis. (2) Tn., Poland. See LESZNO.

Lith'erland, urb. dist., Lancs, England; residential suburb of Liverpool; manufactures matches. Pop. 16,000.

Lith'gow (*lîth'gō*), tn., New South Wales, Australia, 60 m. N.W. of Sydney; on coalfield; government small-

arms factory; ironworks, potteries. Pop. 16,500.

Lithuania (*lîth-u-ā'nē-a*), rep., on Baltic Sea, Europe; bounded N. by Latvia, E. and S. by Poland, and W. by E. Prussia and Baltic Sea; S. frontier still in dispute with Poland; surface generally plain; chief riv., Niemen; climate extreme; agriculture is principal occupation; chief crops, rye, wheat, barley, oats, flax; live-stock and dairy farming; forests; Lithuanians claim Vilna as cap.; present seat of govt., Kaunas (Kovno). Area, c. 22,600 sq. m.; pop. 2,317,000.

Litomerice (*lî'tom-yer-zhî-se*), formerly LEITMERITZ, tn., Czechoslovakia, on R. Elbe, 36 m. N.N.W. of Prague; agricultural centre; brewing. Pop. 17,000.

Littleborough, tn., Lancs, England, 3 m. N.E. of Rochdale; cotton and woollen goods. Pop. 12,000.

Little Falls, city, New York, U.S.A., on Mohawk R.; bicycles, knitted goods, paper, leather. Pop. 13,000.

Littlehampton, tn. and wat.-pl., W. Sussex, England; fine golf links; sea fishing. Pop. 10,200.

Little Hulton, urb. dist., Lancs, England, 3 m. S. of Bolton; coal mining; cotton spinning. Pop. 7,900.

Littleport, mkt. tn., Cambridgeshire, England, 5 m. N.N.E. of Ely; shirt factory; skating championships held here. Pop. (par.) 4,500.

Little Rock, cap., Arkansas, U.S.A.; machinery, cotton-seed cakes, and oil; head of navigation for large steamboats on Arkansas R.; exp. cotton. Pop. 82,000.

Little St. Bernard Pass leads from French valley of upper Isère to Italian valley of Aosta; traversed by carriage road; alt. 7,179 ft.

Liukiu Islands. See RYUKYU ARCHIPELAGO.

Liv'erpool, city and co. bor., Lancs, England, on estuary of R. Mersey; greatest seaport on W. coast, with many miles of docks; tunnels and ferry steamers cross Mersey to Birkenhead. Accounts for one-fourth of imports and two-fifths of exports of U.K.;

chief imports are raw cotton, wheat, live-stock, wool, tobacco, sugar, timber; chief exports: iron and steel manufactures, cottons, chemicals, machinery, silk, woollen and linen goods; principal industries are shipbuilding, with associated metal industries, flour and rice milling, sugar refining, manufacture of tobacco, glass, chemicals; centre of slave trade in 18th cent.; owes its importance to s. Lancs coal-field and cotton industry. Pop. 855,500.

Liversedge, tn., W. Riding, Yorks, England, 6 m. s.e. of Bradford; woollen and cotton goods; chemicals, machinery. Pop. 15,000.

Livingstone, cap. of N. Rhodesia, near R. Zambezi, 7 m. from Victoria Falls. Pop. (white) 800.

Livingstonia, mission station, Nyasaland, Africa, on n.w. L. Nyasa; mission established on s. of lake (1875).

Livny, tn., central Russia, 80 m. s.e. of Orel; trades in leather, live-stock, and general agricultural produce. Pop. 21,000.

Lizard Point, or **THE LIZARD**, promontory with dangerous reef, s. Cornwall, England; most s. point of Great Britain; fine cliff scenery.

Ljubljana (*lyoob'lyan-a*), formerly **LAIBACH**, tn., Yugoslavia, 40 m. n.e. of Trieste; episc. see; tourist centre; textiles, chemicals, beer, and leather. Pop. 57,000.

Llanberis (*hlan-ber'is*), tn., Carnarvonshire, N. Wales; slate quarries; starting-point for ascent of Snowdon. Pop. 2,400.

Llandaff (*hlan-daf'*), tn., Glamorganshire, Wales; cathedral and ruined episc. palace; practically a suburb of Cardiff. Pop. 13,300.

Llanddeiniolen (*hlan-di-ni-ol'en*), par. and vil., Carnarvonshire, Wales, 4½ m. n.e. of Carnarvon; slate quarrying; prehistoric remains. Pop. (par.) 4,800.

Llandeibie (*hlan-deb'i*), par. and vil., Carmarthenshire, Wales, 12 m. n.e. of Llanelly; coal and ironstone mining. Pop. (par.) 8,000.

Llandilo (*hlan-dil'o*), or **LLANDEILO**,

urb. dist., Carmarthenshire, Wales, on R. Towy; in neighbourhood are ruins of Dinefawr Castle; corn and woollen mills. Pop. 1,900.

Llandovery (*hlan-dov'er-i*), munic. bor., Carmarthenshire, Wales, on R. Towy; ruined castle; cattle mkt. Pop. 2,000.

Llandrindod (*hlan-drin'dod*), or **LLANDRINDOD WELLS**, tn., Radnor, Wales; mineral springs. Pop. 2,900.

Llandudno (*hlan-did'no*), tn., Carnarvonshire, N. Wales, between Great Orme's Head and Little Orme's Head; summer resort. Pop. 13,700.

Llanelli (*hlan-eth'li*), mkt. tn. and port, Carmarthenshire, Wales; copper works; tinplate, chemicals, bricks, tiles; collieries; exp. anthracite and bituminous coal. Pop. 38,400.

Llanes (*lya'nez*), port, Oviedo, N. Spain; summer resort; trade in timber, butter, and fish. Pop. 23,000.

Llanfairfechan (*hlan-fair-veh'an*), tn., n. Carnarvonshire, Wales, at foot of Penmaenmawr mountain; seaside resort. Pop. 3,200.

Llangollen (*hlan-goth'len*), mkt. tn. and summer resort, Denbighshire, Wales; has ruined fortress; bridge over Dee dates from 1345; tourist resort; flannel. Pop. 2,900.

Llanidloes (*hlan-id'lois*), mkt. tn. and munic. bor., Montgomeryshire, Wales, on R. Severn; tourist resort; manufactures flannel; lead mining. Pop. 2,400.

Llanrwst (*hlan-roost'*), mkt. tn., Denbighshire, Wales, 10 m. s. of Conway; tanneries, breweries; flannel. Pop. 2,400.

Llantrisant (*hlan-tris'ant*), mkt. tn., Glamorganshire, Wales, 10 m. n.w. of Cardiff; ruined castle; coal mining. Pop. 22,000.

Llanwrtyd Wells (*hlan-wor'tid*), vil., Breconshire, Wales; mineral springs. Pop. 700.

Loanda (*lo-and'a*), **ST. PAUL DE**, port, Angola, W. Africa; exports rubber, wax, ivory, palm oil, coffee, rum, coconuts; episc. see. Pop. c. 23,000.

Loango (*lo-ang'go*), port, French

Equatorial Africa, lying n. of mouth of R. Congo; formerly centre of slave trade; exports rubber, palm oil.

Loanhead (*lōn-hed'*), tn., Midlothian, Scotland, 5 m. s. of Edinburgh; coal and ironstone mining; paper mills in vicinity. Pop. 3,900.

Lobito Bay (*lob-ē'tō*), port, Angola, W. Africa, 22 m. by rail n. of Benguela; large harbour works; terminus of Benguela Rly., which joins 'Cape to Cairo' Rly. at Tenke, in Katanga prov., Belgian Congo. White pop. c. 600.

Lob Nor. See **LOR NOR.**

Locarno, tn., Ticino canton, Switzerland, on L. Maggiore, 15 m. n.w. of Lugano; Locarno Treaties signed here (1925). Pop. 5,550.

Lochgelly (*loch-gel'i*), tn., Fife, Scotland, 7 m. n.e. of Dunfermline; coal, iron. Pop. 9,300.

Lochmaben, royal burgh, Dumfriesshire, Scotland, 7 m. n.e. of Dumfries; ruins of castle, formerly the seat of the Bruces; tourist resort. Pop. 1,000.

Lochnagar, mt. peak, Grampian plateau, Aberdeenshire, Scotland, between Balmoral Castle and Loch Muick; alt. 3,768 ft.

Lochwinnoch, tn., Renfrewshire, Scotland, on R. Calder at s.w. of Castle Semple L., 16½ m. s.w. of Paisley; makes furniture. Pop. 4,225.

Lock'erie, mkt. tn., s. Dumfriesshire, Scotland; annual sheep and lamb sales; rly. jn. Pop. 2,600.

Lockport, tn., New York, U.S.A., 25 m. n.e. of Buffalo; fruit, chalk, sandstone; machinery, pulp, paper, furniture, flour. Pop. 21,000.

Loele, LE (*lōl*), tn., Switzerland, 16 m. n.w. of Neuchâtel; centre of watch-making industry; first watch made here (1680). Pop. 12,000.

Lodi (*lō-dē*), tn., Lombardy, Italy, 20 m. s.e. of Milan; manufactures majolica; dairy produce, especially Parmesan cheese; cathedral (1158). Pop. 29,000.

Lodore Falls, waterfalls, Cumber-

land, England, near s. end of Derwentwater; made famous by Southey.

Lodz (*woodz*), tn., Poland, 82 m. s.w. of Warsaw; large cotton mills; silk, wool, linen, flour, and iron industries. Pop. 452,000.

Lofoten (*lō-fō'ten*), or **LOFODEN**, Islands, large group of islands off n.w. coast of Norway; good pasturage for cattle; cod fishing important; exports fish guano and oil; contains once dreaded whirlpool Maelstrom. Area, c. 2,000 sq. m.

Lof'tus, urb. dist., N. Riding, Yorkshire, England, 12 m. n.w. of Whitby; ironstone and alum rock are worked. Pop. 7,600.

Lo'gan, MOUNT, peak, Cordilleras, s.w. Yukon Terr., Canada, close to Alaskan boundary; probably second highest peak in N. America. Alt. 19,514 ft.

Lo'gansport, city, Indiana, U.S.A., 90 m. s.e. of Chicago; important trade in lumber, grain, fruits; machinery, woollen goods. Pop. 21,000.

Logroño (*lō-grō'n yō*). (1) Prov., Old Castile, Spain; mountainous; produces vegetables and fruit; specially famous for red wines; iron, silver, lead are found. Area, 1,946 sq. m.; pop. 194,000. (2) Walled tn., cap. of above, on R. Ebro; centre of Rioja wine dist. Pop. 27,000.

Loire (*lōvēr*). (1) Longest riv. of France; rises in Cevennes, and after flowing some distance n., bends to w. and enters Bay of Biscay; chief tribs., Allier, Vienne, Sarthe; largest towns on banks, Orleans, Tours, Angers, Nantes; subject to frequent floods, and dykes constructed to prevent inundations. Length, 620 m. (2) Dep., France; mountainous; drained by R. Loire and Rhone; coal; iron and lead mines; manufactures iron and steel goods, machinery, textiles, glass, paper. Chief tn., St. Etienne. Area, 1,852 sq. m.; pop. 669,000.

Loire-Inférieure (*lōvēr-an-fā-rē-oor'*), coast dep., w. France; surface generally low and flat; drained by Loire; produces cereals, potatoes, wine, cider; dairy farming, stock raising; salt

manufactured from coastal marshes; fishing; coal, iron, copper, machinery, shipbuilding. Chief tns., Nantes (cap.) and St. Lazaire. Area, 2,693 sq. m.; pop. 651,000.

Loiret (*lwa-râ*), inland dep., France; surface rises from N.W. to S.E.; drained by R. Loire and tributaries of R. Seine; forests; wheat and oats; live-stock; manufactures woollens, leather, sugar, flour; iron and copper founding. Chief tn., Orleans. Area, 2,629 sq. m.; pop. 341,000.

Loir-et-Cher (*lwa-râ-shâr*), inland dep., France; watered by Rs. Loir and Cher; produces cereals, fruit, vegetables, timber, wine; horses and sheep bred; manufactures textiles, leather. Chief tn., Blois. Area, 2,478 sq. m.; pop. 248,000.

Loja (*lô'hâ*). (1) City, S. Spain, 30 m. W. of Granada; fortified by Moors; manufactures coarse woollens, silk, paper, and leather; trade in grain and cattle. Pop. 20,000. (2) Prov., S.W. Ecuador, S. America; mountainous; cinchona bark. Area, 3,706 sq. m.; pop. 100,000. (3) Cap. of above; alt. 6,900 ft. Pop. c. 10,000.

Lokeren (*lô'er-en*), tn., E. Flanders, Belgium, 12 m. E. of Ghent; textile, tobacco, and chemical industries. Pop. 23,000.

Lokoja (*lô-kô'ja*), tn., Nigeria, Brit. W. Africa, at junction of Rs. Benue and Niger; military post and formerly chief commercial centre of Protectorate, but since opening of railways its importance has declined.

Lombardy, div., N. Italy, central part of R. Po basin; includes provinces of Bergamo, Brescia, Como, Cremona, Mantua, Milan, Pavia, Sondrio, Varese; contains most Italian lakes; very fertile; large crops of wheat, rice, maize; vineyards; mulberry trees; chief industrial dist. of Italy; manufactures textiles (particularly silk goods), automobiles, and paper; iron, zinc, and marble worked. Chief town, Milan. Area, 9,190 sq. m.; pop. 5,400,000.

Lombok, one of Lesser Sunda Islands, Dutch E. Indies; volcanic;

mountainous (highest peak, c. 12,000 ft.); fertile valleys; rice and coffee. Wallace's Line passes between Bali and Lombok. Area, c. 3,000 sq. m.; pop. 599,000.

Lomond (*lô'mond*), Loch, between Dumbartonshire and Stirlingshire, Scotland; largest lake in Scotland; drains to Clyde by the Leven; almost entirely surrounded by mountains; picturesque scenery. Length, 24 m.; breadth, 1 to 5 m.

Lomza (*lô'm'zhâ*), tn., Bialystok, Poland, on R. Narev, 75 m. N.E. of Warsaw; trade in grain and timber. Pop. c. 25,000.

London. (1) Cap. of U.K., and largest city in world; on both banks of R. Thames, at the head of navigation. Greater London (including the City of London, the Administrative County, and the 'Outer Ring') occupies parts of Middlesex, Surrey, Kent, Essex, and Hertfordshire. The following metropolitan boroughs make up the Administrative County: N. of Thames are Hammersmith, Fulham, Chelsea, Westminster, Kensington, Paddington, Marylebone, Hampstead, St. Pancras, Finsbury, Islington, Hackney, Shoreditch, Bethnal Green, Stepney, Poplar, Stoke Newington, and Holborn; on S. side are Wandsworth, Battersea, Lambeth, Deptford, Greenwich, Woolwich, Camberwell, Lewisham, Southwark, and Bermondsey. The City of London, the oldest part and chief business centre, has area of 678 ac.; Administrative County, c. 117 sq. m.; Greater London, or metropolitan police area, c. 692 sq. m.

The Bank of England may be called the central point of the City. Traffic crosses R. Thames by nineteen bridges as well as by steamers and five tunnels.

London is full of interesting buildings. Most important churches include Westminster Abbey, St. Paul's Cathedral (built by Sir Christopher Wren), Temple Church, St. Martin-in-the-Fields, and the R.C. cathedral at Westminster. Among important public buildings are: Tower of London

(built by William the Conqueror), Houses of Parliament, Guildhall, Mansion House, Royal Exchange and Bank of England, Somerset House and law courts, Brit. Museum, Victoria and Albert and Natural History Museums. Fine art collections include: National Gallery, National Portrait Gallery, the Wallace Collection, and Tate Gallery; annual exhibition of Royal Academy is held at Burlington House. Royal palaces include Buckingham Palace, St. James's Palace, Marlborough House, Kensington Palace. There are many beautiful parks, including Hyde Park and Kensington Gardens, Green Park and St. James's Park, Regent's Park (which contains Zoological and Botanical Gardens), Battersea Park, Hampstead Heath and Ken Wood, favourite Bank Holiday resorts. London is seat of univ., and has famous public schools, hospitals, and theatres.

One of the world's busiest seaports, the Port of London extends from the lock at Teddington to an imaginary line drawn from Warden Point, Isle of Sheppey (Kent), to Havengore Creek, on the shores of Essex. It has c. 30 per cent. of total trade of U.K.; value of imports is nearly double that of exports, owing to enormous population and distance from coal. London is important distributing centre, and is meeting-place of all the great railway systems of the kingdom. There is enormous dock accommodation—London Docks, St. Katharine Dock, East and West India, Royal Victoria, Royal Albert, Millwall, Tilbury, King George v., and other docks. It is also the largest manufacturing city in Great Britain, and its industries include those connected with food supply, clothing, shipping appliances, house fittings and furnishings, textiles.

There are many notable markets, including Billingsgate Fish Market, Leadenhall Meat Market, London Central Markets, in Smithfield, for fruit, meat, provisions, and Covent Garden for flowers, fruit, and vegetables. Pop. of City, 11,000; of

(3,601)

County, 4,396,800; of Greater London, 8,202,800.

(2) **Tn.**, Ontario, Canada, c. 100 m. s. of Toronto; centre of rich agricultural dist.; large trade in grain, live-stock; factories, foundries, railway shops, chemical works, petroleum refineries, sulphur springs. Pop. 61,000.

Londonderry. (1) Maritime co., N. Ireland; surface hilly in centre and s., elsewhere flat; drained by Rs. Foyle, Bann, Roe; linen manufactures, agricultural produce, fisheries. Area, c. 800 sq. m.; pop. 140,000. (2) **Or DERRY**, cap. of above, on R. Foyle; encircled by walls; Anglican and R.C. cathedrals; excellent harbour; has salmon fisheries, shipbuilding yards, linen manufactures, distilleries. Famous siege (1689). Pop. 45,000.

Long, Loch, arm of sea between Argyllshire and Dumbartonshire, Scotland; picturesque scenery; extends n. and s. for 17 m.

Long Ash'ton, par. and vil., Somerset, England, 3 m. s.w. of Bristol; stone quarries. Pop. (par.) 2,220.

Long Beach, seaside resort, California, U.S.A., 20 m. s. of Los Angeles; lumber, fruits, oil, and natural gas. Pop. c. 142,000.

Longbenton, urb. dist., Northumberland, England, 4 m. n. of Newcastle; coal mining. Pop. 14,100.

Long Branch, city, wat.-pl., New Jersey, U.S.A.; market gardening; settled about 1667. Pop. 13,000.

Long Eaton, urb. dist., Derbyshire, 10 m. s.e. of Derby; lace making and rly. carriage building. Pop. 22,300.

Longford. (1) Inland co., Leinster, I.F.S., with extensive tracts of bog; bare hills on Leitrim border; good grazing land in centre and s.; agriculture, especially stock raising and dairy farming, is chief industry. Area, c. 400 sq. m.; pop. 40,000. (2) Cap. of above; agricultural centre; seat of R.C. bishop; tanning, corn milling. Pop. 3,700.

Long Island, isl., New York State, U.S.A., separated from mainland by

East R., a narrow channel which widens to N.E. as Long Island Sound; surface undulating; considerable area is woodland and sandy waste, and there are a number of lakes; at W. end of island are Queen's Borough (with Long Island City) and Brooklyn, now parts of New York City; Coney Island is popular resort. Excellent fisheries and oyster beds; market gardening. Area, 1,681 sq. m.

Long Mel'ford, par. and tn., Suffolk, England, 14 m. S. of Bury St. Edmunds; two Elizabethan moated houses. Pop. (par.) 2,700.

Long'ridge, urb. dist., Lancashire, England, 7 m. N.E. of Preston; cotton spinning and weaving, brassfounding; noted building-stone quarries. Pop. 4,200.

Long'ton. See STOKES-UPON-TRENT.

Long'town, mkt. tn., Cumberland, England, on R. Esk, 9 m. N. of Carlisle; brick and tile works. Pop. 6,400.

Longwy (*lon-ve'*), tn., Meurthe-et-Moselle, France, c. 90 m. N.N.W. of Nancy; ironworks; porcelain. Pop. 12,000.

Lons-le-Saunier (*lon-li-sō'nē-ā*), cap., Jura, France; salt springs; produces wine, and trades in live-stock and agricultural produce. Pop. 11,000.

Loe-choo Islands. See RYUKYU ARCHIPELAGO.

Loe, port, Cornwall, England, 17 m. W. of Plymouth; fisheries; exp. clay and granite. Pop. 2,900.

Loon, largest tn. of isl. of Bohol, Philippines, on W. coast; good anchorage. Pop. 24,000.

Loos (*lōs*), vil., Pas-de-Calais, France, 2½ m. N.W. of Lens; coal mines; scene of fierce battle (1915).

Lop Nor, lake, Sinkiang, China, in desert of Gobi; shallow and fresh water.

Lorain (*lō-rān'*), city, Ohio, U.S.A., on L. Erie; fine harbour; ships coal-steel works and shipbuilding yards; important fisheries. Pop. 44,000.

Lorea (*lor'hā*), tn., Murcia, Spain, 40 m. W. of Cartagena; porcelain, woollen goods, chemicals, leather;

trade in agricultural products and live-stock. Pop. 75,000.

Lord Howe Islands, group of islands, S. Pacific, between Australia and New Zealand; vegetation abundant, especially banyan trees; discovered in 1788, occupied in 1834. Belong administratively to New South Wales. Area, 5 sq. m.; pop. 112.

Loreto (*lor-ā'tō*). (1) Dep., N.E. Peru; a vast plain; thickly wooded; traversed by R. Marañon and tribs.; resources abundant but not well developed; chief export, rubber. Cap. Iquitos. Area, 163,240 sq. m.; pop. c. 150,000. (2) Tn., Marches, Italy, 15 m. by rail S.E. of Ancona; cathedral church of the Holy House is place of pilgrimage for Roman Catholics. Pop. 6,700.

Lorient (*lō'ri-on*), seapt., Morbihan, France, on Bay of Biscay; great naval arsenal and dockyard; exp. sardines, etc. Pop. 38,000.

Lorraine. See ALSACE-LORRAINE.

Los Angeles (*ang'el-ēs* or *an'je-lēs*), tn., S. California, U.S.A.; centre of fruit-producing dist.; important petroleum industry; other industries include fruit canning, meat packing, lumbering, manufacture of flour, steel, cottons. Hollywood, the great centre for production of cinema films, was annexed to Los Angeles in 1910. Pop. 1,234,000.

Los'siemouth, tn., Morayshire, Scotland; wat.-pl.; fishing. Pop. 3,900.

Lostwith'iel, mkt. tn., on R. Fowey, Cornwall, England; railway workshops. Pop. 1,300.

Lot (*lō* or *lot*). (1) Riv., S. France; rises in Cévennes; joins Garonne near Aiguillon; length, 300 m.; 160 m. navigable. (2) Dep., S.W. France; hilly; chief rivs., Lot and Dordogne; principal products, wine, tobacco, cereals, chestnuts, truffles, and live-stock, especially sheep; iron and coal mines. Cap. Cahors. Area, 2,017 sq. m.; pop. 172,000.

Lot-et-Garonne (*lot-ē-gā-rōn'*), dep., S.W. France; watered by Rs. Garonne and Lot; chief occupation, agriculture; produces cereals, potatoes,

vines, tobacco, and fruit, especially plums and apricots. Cap. Agen. Area, 2,078 sq. m.; pop. 247,000.

Loughborough (*lūf-bū-ū*), mkt. tn., N. Leicestershire, England; hosiery, locomotives, machinery. Pop. 26,900.

Loughrea (*loch-rē*), mkt. tn., on Lough Rea, Galway, I.F.S.; remains of old fortifications. Pop. 2,800.

Loughton (*lou-ton*), tn., Essex, England; part of Greater London. Pop. 7,400.

Louisburg (*loo-is-burg*), tn., and ruined fortress, Cape Breton I., Nova Scotia, Canada; formerly important seaport and headquarters of cod-fishing industry; lobster canning and export of coal. Pop. 1,100.

Louisiana (*loo-ē-zē-na*), one of Southern States of U.S.A., bounded N. by Arkansas, E. by Mississippi, S. by Gulf of Mexico, W. by Texas. Surface flat and marshy, especially towards the sea; R. Mississippi delta occupies about one-third of total area; drained by R. Mississippi, Red R., and Sabine; climate semi-tropical; state thickly wooded in parts, producing yellow pine, cypress, cottonwood, red gum, oak; a great cotton, maize, sugar-cane, and rice producing region, esp. along coast and Mississippi valley; also corn, oats, potatoes, tobacco, fruits. Horses, cattle, sheep, and pigs; important oyster fisheries. Industries include lumbering, sugar refining, preparation of rice, manufactures of machinery, cotton-seed oil, tobacco, and confectionery. Minerals include rock salt, sulphur, and petroleum. Cap. Baton Rouge; largest towns, New Orleans, Shreveport. Area, 48,506 sq. m.; pop. 1,798,000.

Louisville (*loo-i-vil* or *loo-is-vil*), tn., Kentucky, U.S.A., on Ohio R.; chief trading city in state, and largest tobacco mart in world; other industries, leather, meat packing, manufacture of machinery, furniture, metal pipes, flour, cotton-seed oil and cake; great rly. centre; important port on Ohio R. Has univ., many educational and charitable establishments, and fine parks. Pop. 308,000.

Loulé (*loo-lā*), tn., Faro, S. Portugal; basket making; leather and porcelain manufactures. Pop. 23,000.

Lourdes (*loo-rē*), tn., Hautes-Pyrénées, France, on R. Pau; ancient castle; place of R.C. pilgrimage, on account of sacred spring, whose waters are credited with miraculous cures; marble and slate quarries. Pop. 8,000.

Lourenço Marques (*loo-ren'sō mar-kās*), cap., Portuguese E. Africa, on Delagoa Bay; founded as trading post (1544); terminus of railway to Pretoria, carrying large percentage of Rand imports and exports; has excellent harbour; coaling port. Pop. 37,000.

Louth. (1) Co., Leinster, I.F.S., extends from Carlingford Lough in N. to riv. Boyne in S.; smallest co. in Ireland; hilly in N., flat elsewhere; rivers Fane, Laggan, Dee, and Glyde enter Dundalk Bay; is chiefly agricultural; fishing; oysters are found in Carlingford Lough; linen manufactured. Area, 316 sq. m.; pop. 63,000. Chief towns, Dundalk (co. tn.), Drogheda. (2) Mkt. tn. and munic. bor., Lincolnshire, England, 15 m. S.E. of Grimsby; agricultural centre; iron foundries. Pop. 9,700.

Louvain (*loo-van*), or **LEUVEN**, tn., Brabant, Belgium, 18 m. E. by N. of Brussels. Manufactures beer, lace, starch, tobacco; destroyed in Great War by the Germans, who burnt univ. with famous library. Much rebuilding (including univ.) done since the war. Pop. 41,000.

Louviers (*loo-vē-ā*), tn., Eure, France, 17 m. S. of Rouen; cloth manufactures, tanyards, and casting of bells. Pop. 9,000.

Lovedale, Scottish educational and mission station, Cape Province, S. Africa, c. 90 m. N.W. of E. London.

Low Archipelago. See **TUAMOTU**.

Lowell (*lō-el*), tn., Massachusetts, U.S.A., on Merrimac R., 25 m. N. of Boston; cotton, woollens (carpets, hosiery, etc.), iron goods, cartridges, machinery, chemicals, patent medicines. Pop. 100,000.

Lowestoft (*lō'stoft* or *lō'es-toft*),

munic. bot., seaport, and seaside resort, Suffolk, England, on North Sea; old town stands on cliff forming part of Lowestoft Ness, most easterly cape in England; great centre of herring fishery; net making, boat building. Pop. 41,800.

Loyalty Islands, group of coral islands, s. Pacific; included in French administration of New Caledonia, which lies about 60 m. w.; coconuts, rubber, copra. Area, 800 sq. m.

Lozère (*lô-zâr*), dep., s. France; surface very mountainous; Cévennes Mts. in s.e.; drained by R. Lot; subject to violent rainstorms; sheep and cattle rearing and cheese making are the chief occupations; cereals, fruit, and chestnuts grown; extensive forests; culture of silkworms; valuable deposits of silver, lead, copper, and antimony. Cap. Mende. Area, 1,996 sq. m.; pop. 105,000.

Luang-Prabang (*loo-ang' pra-bang*), chief tn., Laos, French Indo-China, on R. Mekong, at head of navigation; products include rubber, ivory, silk, indigo. Pop. c. 12,000.

Lübeck (*loo'bek*). (1) Republic, n. Germany, on Baltic Sea; fertile; cereals, fruit. Area, 115 sq. m.; pop. 128,000. (2) Free city, cap. of above, on R. Trave, about 12 m. from Baltic; important port, trading chiefly with Baltic countries; a picturesque old town, founded in 12th cent. Chief industries are shipbuilding, machinery, chemicals, breweries, soap. Pop. 121,000. (3) Province. See OLDENBURG.

Lublin (*loo'b'lin*), tn., Poland, 100 m. s.e. of Warsaw; manufactures thread, hemp, linen, and woollen goods, and trades in grain and agricultural produce. Pop. 94,000.

Lucera (*look'a*), tn., n. Tuscany, Italy, 13 m. n.e. of Pisa; seat of archbishop; has a cathedral dating in part from 11th cent., and containing fine pictures; many old churches, palaces, and educational establishments; manufactures silk, cotton, jute. Pop. 78,000.

Lucena (*loo-thá'na*), tn., s. Spain, 35

m. s.e. of Cordoba; brandy, wine; textiles, pottery, matches, earthenware. Pop. 23,000.

Lucera (*loo-chá'na*), tn., Apulia, s. Italy, 30 m. w. of Gulf of Manfredonia; cathedral and castle; silk. Pop. 17,000.

Lucerne (*loo-ern*), or **LUZERN**. (1) Canton, Switzerland; chief stream, R. Reuss; agriculture and dairy farming. Area, 575 sq. m.; pop. 177,000. (2) Cap. of above; beautifully situated on L. Lucerne; tourist resort; anc. town hall, Hofkirche, museum, arsenal, glacier garden; sewing machines, cotton goods, cheese. Pop. 46,000. (3) LAKE OF ('lake of the four forest cantons'), Switzerland, surrounded by cantons of Lucerne, Unterwalden, Schwyz, and Uri; area, 44 sq. m.; overlooked by Mts. Pilatus and Rigi; traversed by R. Reuss; subject to sudden storms; beautiful scenery; associated with William Tell.

Luck (*wootsh*), or **LUTSK**, river port, Volhynia, Poland, on R. Styr, 85 m. n.e. of Lwow; manufactures glass, cloth, paper. Pop. c. 20,000.

Luckenwalde (*look-en-vald'a*), tn., Brandenburg, Prussia, 30 m. s. of Berlin; cloth, hats; machine shops, foundries, and breweries. Pop. 25,000.

Lucknow, city, United Provinces, India, on R. Gumti; noted for heroic defence (1857) in Indian Mutiny; muslins, brassware, pottery; important railway centre with railway workshops; univ. (1920). Pop. 240,000.

Lüdenscheid (*loo'den-shit*), tn., Westphalia, Prussia, 19 m. e. by s. of Barmen; iron foundries, metal ware. Pop. 33,000.

Lüderitz (*lood'er-itz*), formerly **ANGRA PEQUEÑA**, tn. and bay, S.W. Africa; good natural harbour; surrounding country desert, but rly. links up with S. African system at De Aar; important diamond centre; fisheries. Pop. c. 2,000.

Ludhiana (*lood-hi-á'na*). (1) Dist., Punjab, India; wide-spreading plain producing wheat, maize, and sugar. Area, 1,452 sq. m.; pop. 568,000.

(2) Tn. in above, near R. Sutlej, 80 m. w. of Simla; trade in grain, shawls, cloths, and turbans; rly. jn. Pop. 52,000.

Lud'low, mkt. tn., s. Shropshire, England; tanning, corn milling. Here Butler wrote *Hudibras* and Milton's *Comus* was first performed (1634). Pop. 5,600.

Ludwigsburg (*lood'vigs-boorg*), tn., Württemberg, Germany, 10 m. n. of Stuttgart; iron foundry and arsenal; chemicals and textiles. Pop. 29,000.

Ludwigshafen (*lood'vigs-hä-fen*), tn., Palatinate, Germany, on R. Rhine, opposite Mannheim; aniline dyes and chemicals; iron foundries, breweries, sawmills. Pop. 102,000.

Lugano (*loo-gä'nō*). (1) Tn., Ticino, Switzerland, on Lake Lugano; tourist centre; silk, paper. Pop. 13,000. (2) Lake, Switzerland and N. Italy; length, 22 m.; breadth, 1 m.; delightful scenery.

Lugansk (*loo-gansk'*), or LUGAN, tn., Ukraine, U.S.S.R., situated on the Donetz coal basin; iron foundries and engine shops; flour milling and brewing. Pop. 71,000.

Lugar (*loo'gar*), par. and vil., Ayrshire, Scotland, 16 m. e. of Ayr; has extensive ironworks. Pop. (par.) 3,000.

Lugo (*loo'gō*), tn., Galicia, N.W. Spain, on R. Minho; chief industries are tanning and textile manufacture; hot sulphur baths. Pop. 28,000.

Luleå (*loo-lē'ō*). (1) Seapt., Sweden, on Gulf of Bothnia; exp. Gellivara iron ore, timber, tar, salmon, reindeer hides. Pop. 11,000. (2) Or LULE, riv., Sweden; length, 255 m.

Lumphinnans (*lūm-fīn'ans*), vil., Fife, Scotland, 1 m. w. of Lochgelly; coal. Pop. 2,500.

Lund (*loond*), tn., Sweden, 10 m. N.N.E. of Malmö; univ.; furniture, gloves; sugar refining, iron smelting. Pop. 25,000.

Lundin Links, vil., Fife, Scotland, 1 m. w. of Largo; summer resort. Pop. 1,000.

Lundy (*lūn'di*), small isl. at entrance of Bristol Channel, England; interesting ruins. Area, 1,047 ac.; pop. 48.

Lüneburg (*loon'ē-boorg*), tn., Hanover, Prussia, on R. Ilmenau, 27 m. S.E. of Hamburg; anc. Hanse town; old Gothic churches and interesting mediæval buildings; cement and salt; beer, chemicals, ironware. Pop. 29,000.

Lunéville (*lū-nū-vē'*), tn., Meurthe-et-Moselle, E. France, on R. Meurthe, 18 m. S.E. of Nancy; cotton and woollen industries, gloves, hosiery, glass. Pop. 20,000.

Lungchow, port, Kwangsi, China; opened to foreign trade in 1889; is being well developed. Pop. 15,000.

Lurgan, tn., N.E. co. Armagh, N. Ireland; manufactures cambric, diaper, lawn, and tobacco. Pop. 12,500.

Lushai Hills, dist., India, in Lushai Hills, on frontier of Assam, Bengal, and Burma; largely forest and jungle; became British in 1890. Area, 7,230 sq. m.; pop. 98,000.

Luton (*loo'ton*), mkt. tn., S.E. Bedfordshire, England, on R. Lea; straw and felt hats; dyeworks; brass, iron, and motor-car works. Pop. 68,500.

Lutsk. See LUCK.

Lut'terworth, mkt. tn., s. Leicestershire, England; Wyclif was rector here. Pop. 2,100.

Lüttringhausen (*loot-ring-hou'zen*), tn., Rhineland, Prussia, 6 m. S.E. of Elberfeld; ironmongery, cotton goods. Pop. 14,000.

Lützen (*loot'zen*), tn., Prussian Saxony, 12 m. S.W. of Leipzig; here Wallenstein was defeated by Gustavus Adolphus of Sweden, who was killed in action (1632). Pop. 4,000.

Luxembourg. (1) Grand-duchy, Europe, bordering on Belgium, Prussia, and France; surface generally tableland; iron ore; manufactures hardware, leather, beer, paper; in economic union with Belgium. Area, 999 sq. m.; pop. 285,000. (2) Cap. of above duchy. Pop. 52,000. (3) (*looks-an-boor'*) Prov., S.E. Belgium; high-lying and wooded; produces marble, fruit, timber. Cap. Arlon. Area, 1,706 sq. m.; pop. 224,000.

Lux'or, tn., Upper Egypt, on R.

Nile, 120 m. N. of Aswan; contains magnificent ruins of Thebes.

Lur'ulan, par. and vil., Cornwall, England, 6 m. S.W. of Fowey; granite quarries. Pop. 1,000.

Lusern. See LUCERNE.

Luzon, island, Philippine Islands; largest and most northerly of group; irregular in shape, with three main mountain ranges, largely volcanic; well-watered, chief rvs. being Rio Grande de Cagayan, Agno, and Abra; vegetation is luxuriant; chief crops are rice, sugar, hemp, cotton, coffee, maize, and tobacco; chief minerals are coal, copper, gold, asphalt; industries include manufacture of silks and cottons, leather goods. Cap. Manila. Area, 40,814 sq. m.; pop. c. 4,000,000.

Lwow (*lwoof*), formerly LEMBERG, city, Poland, on the Peltew R., 185 m. E. of Cracow; seat of three archbishoprics—R.C., Greek Catholic, and Armenian; univ.; machinery, ironware, liquors, leather, matches, and candles are manufactured. Pop. 219,000.

Lyek, or LYE (*lik*), tn., E. Prussia, 100 m. S.E. of Königsberg; machinery, tiles, paper, leather, and flour. Pop. 15,000.

Lyd'brook, or LIDBROOK, vil., Gloucestershire, England, 14 m. W. of Gloucester; coal, iron, and tin mines; chemicals. Pop. 2,500.

Lydd, mkt. tn., S. Kent, England; 'Lyddite' shells; important military camp. Pop. 2,800.

Lydenburg (*li'den-burg*), tn., Transvaal, S. Africa, 144 m. E.N.E. of Pretoria; gold mining; sheep farming, and growing of cotton, wheat, and tobacco. Pop. 1,500.

Lyd'ford, par. and vil., Devonshire, England, 11 m. E. of Launceston, on edge of Dartmoor; was long the chief town of the Devonshire 'Stannary.' Pop. 2,300.

Lyd'ney, par. and tn., Glos, England, in Forest of Dean, 8 m. N.E. of Chepstow; iron and tin factory; exports coal and iron. Pop. (par.) 5,000.

Lye and Wollescote, urb. dist.,

Worcestershire, England, 1½ m. E. of Stourbridge; coal mines; bricks, nails, vices, anvils. Pop. 12,200.

Lyme Regis (*lim rē'jis*), seaport and wat.-pl., Dorsetshire, England; 'blue lias' cliffs quarried for manufacture of lime and cement. Pop. 2,600.

Ly'mington, seapt. and mkt. tn., New Forest dist., Hampshire, England; yacht building. Pop. 5,200.

Lymm (*lim*), urb. dist., Cheshire, England, 5 m. E. of Warrington; residential dist. Pop. 5,600.

Lympne (*lim*), or LYNN, vil., E. Kent, England, 2½ m. W. of Hythe; air station; wireless station; Roman remains. Pop. 600.

Lynch'burg, city, Virginia, U.S.A., on James R., 95 m. W. of Richmond; tobacco trade; agricultural implements, boots and shoes. Pop. 41,000.

Lynd'hurst, par. and vil., Hants, England, in New Forest, 9 m. W.S.W. of Southampton; has been administrative centre of New Forest from ancient times. Pop. (par.) 2,500.

Lynn, seapt., Massachusetts, U.S.A., 10 m. N.E. of Boston; centre of boot and shoe trade; electrical machinery. Pop. 102,000.

Lyn'ton and Lyn'mouth, two sea-side resorts, N. Devon, England; Lyn-ton is situated on cliff 500 ft. high, with Lynmouth below; connected by water-balance lift. Pop. 2,000.

Lyons, or LYON (*lions* or *l'ion*), third city of France, at confluence of Rs. Rhone and Saône; episc. see; great commercial and industrial town; centre of silk trade; first-class fortress; many fine bridges and quays; Roman remains (aqueducts, etc.); mediæval churches; 17th cent. Hôtel de Ville, Palais des Arts, Bourse, unique Musée des Tissus; univ.; Hôtel-Dieu and Hospice de la Charité, first of their kind in France. Chief industries, manufacture of silk fabrics, chemicals, motor-cars, printing, and engineering; great banking centre (*Crédit Lyonnais*). Pop. 571,000.

Lys (*lēs*), riv., France and Belgium,

rises in dep. Pas-de-Calais, and flowing N.E. past Armentières, Menin, and Courtrai, forms boundary between France and Belgium; falls into the Schelde at Ghent. Length, 120 m.

Lytham St. Anne's (*lith-am*), munic. bor., formed by union of Lytham and St. Anne's, Lancashire, England, 5 m. S.E. of Blackpool; favourite

wat.-pl.; graving dock and harbour. Pop. 25,800.

Lytelton, port of Christchurch, E. coast of South Island, New Zealand; artificial harbour; large graving dock; largest export trade of New Zealand; connected with Christchurch by railway tunnelled through hills. Pop. 4,000.

M

Mass. See MEUSE (1).

Manila (*mā-sēn'*), tn., Leyte I., Philippines; fishing industry; manufactures cloth, pottery; exports manila hemp and copra. Pop. 22,300.

Maasluys (*mās-lois*), river port, Holland, on New Waterway, 10 m. W. of Rotterdam; fishing, and sail making. Pop. 10,000.

Maastricht (*mās-tricht*), tn., cap., Limburg, Holland, on R. Meuse; manufactures tobacco, glass, pottery; distilleries, breweries. Pop. 60,000.

Ma'blethorpe and Sutton, wat.-pl., Lincolnshire, England, on coast, 13 m. by rail E. of Louth; frequented by Tennyson; favourite summer resort. Pop. 3,900.

McAlester, tn., Oklahoma, U.S.A., 100 m. S.E. of Oklahoma City; centre of important coal region; railway stock. Pop. 12,900.

Macao (*ma-how'*). (1) Portuguese prov., China, at mouth of Canton R.; comprises Islands of Macao, Taipa, and Colôane. Area, c. 11 sq. m.; pop. 157,000. (2) Tn. on Macao Is.; exp. large quantities of tea, silk, indigo, rice, fish, oil; important fisheries. Pop. 84,000.

Macarsoa (*ma-kar'sha*), tn., port, Dalmatia, Yugoslavia, E. of I. of Braza; trade in wine and grain. Pop. 12,100.

Macassar, port, S. Celebes, Dutch E. Indies; exports coffee, copra, spices, hides, rattans, tortoiseshell, pearls, sandalwood. Pop. 50,000.

Macclesfield (*māk'ls-fīld*), mkt. tn.,

Cheshire, England, on R. Bollin; chief silk manufacturing centre in England; textile manufactures; breweries; coal in vicinity. Pop. 34,900.

Maeduff, port, Banff, Scotland; salmon and herring fisheries; summer resort. Pop. 3,300.

Macedonia (*ma-se-dō'ne-a*), dist., Balkan Peninsula, N. and N.W. of Aegean Sea; partly in Yugoslavia, partly in Greece, bounded on W. by Albania. Yugoslav portion is mountainous, Gr. portion hilly. Chief rvs. are Vardar, Vistritza, Struma, and Mesta. Malaria is rampant. Climate subject to extremes of cold in winter. In alluvial plains and better parts of highlands agriculture is carried on; crops include olives and cotton; rice in Struma valley; irrigation is practised. Fishing is important. In anc. times famed for gold and silver mines, and produced oil and wine. Chief products are grain, tobacco, opium, silk, rice, fruits. Chief rly. follows Vardar R.; transport is mainly by pack animals.

Maceio (*mā-sā-yo'*), tn., Brazil, S. America, 130 m. S. of Pernambuco; exports sugar, cotton, rum, skins, hides; good harbour; cotton and sugar mills. Pop. 74,000.

Macerata (*mā-chā-rā'tā*), tn., episc. see, the Marches, Italy, 22 m. S. of Ancona; univ.; glass, pottery, chemicals. Pop. 24,000.

Macgillycuddy's Reeks (*māk'li-kud-i*), group of mts., Kerry, I.F.S., 6 m. S.W. of Killarney; chief peak,

Carrantuohill (3,414 ft.), is highest mt. in Ireland.

Machynlleth (*ma-hun'leth*), mkt. tn., Montgomeryshire, Wales, on R. Dovey; salmon-fishing centre. Pop. 1,900.

Mackay (*mab-i'*), port, Queensland, Australia; sugar mills; bananas and pineapples; exp. sugar. Pop. 8,800.

McKees' port, city, Pennsylvania, U.S.A., 15 m. s.e. of Pittsburgh; bituminous coal; steel and iron works, blast furnaces. Pop. 55,000.

McKees Rocks, bor., Allegheny, Pennsylvania, U.S.A., on Ohio R., opposite Pittsburgh; coal and natural gas are plentiful; manufactures iron, steel, tin, and enamelled ware; large railway workshops. Pop. 17,000.

Mackenzie. (1) Riv., Canada; rises as R. Athabasca near Mt. Brown, in Rocky Mts.; flows for 680 m. to Lake Athabasca, which it leaves as Great Slave R.; enters Great Slave Lake, then as Mackenzie R. flows n. for c. 1,000 m. into Mackenzie Bay. Total length, 2,300 m.; mouth closed by ice (Oct. to June). (2) Provisional Dist., N.W. Terr., Canada; n. of 60° n. lat., and between Yukon Terr. and Keewatin; includes Great Bear and Great Slave lakes; drained by Mackenzie R.; forested; very sparsely populated. Area, 527,490 sq. m.

McKinley, MOUNT, highest known peak in N. America; in Alaska; alt. 20,464 ft.

Macon (*mā'hon*), cap., Saône-et-Loire, France, on R. Saône; agricultural implements, ropes, mats; copper foundries; celebrated for wines. Pop. 16,000.

Macon (*mā'hon*), city, Georgia, U.S.A., on Ocmulgee R.; important rly. jn.; iron foundries; large trade in fruits, vegetables, and bricks; manufactures cottons; Mercer Univ. Pop. 54,000.

Macquarie. (1) Island, S. Pacific, 700 m. s.s.e. of New Zealand; visited by sailors when hunting seals. Area, 170 sq. m. (2) Riv., New South Wales, Australia; formed by junction of

Fish and Campbell rivs.; joins R. Darling. Length, c. 350 m.

Macroon, urb. dist., Cork, I.F.S., 25 m. w. of Cork; trade in grain and butter; trout and salmon fishing centre. Pop. 2,400.

Madagas'car, large isl. off s.e. coast of Africa; separated from Africa by Mozambique Channel; Fr. colony. Interior rugged, with mountains rising to 3,000-5,000 ft.; highest part of island is near centre, where Ankaratra, an extinct volcano, reaches height of 9,000 ft.; drained by many streams. Climate hot and unhealthy on coasts, more temperate and healthy in interior. Thunderstorms and hurricanes are frequent. Fauna includes lemur and aye-aye. Luxuriant vegetation; bananas, coconuts, orange and mulberry trees, areca palms, pandanus, acacias, ebony; medicinal plants abound; also rubber, cotton, hemp, rice, manioc, coffee, cacao, vanilla, cloves, tobacco, sugar-cane; cattle reared. Minerals include gold, precious stones, mica, graphite, phosphates, copper, iron, lead. Manufactures: silk and cotton, Panama and straw hats; meat preserving. Cap. Antananarivo; other tns., Majunga, Antsirabe, Tamatave. Area, 241,094 sq. m.; pop. 3,621,000.

Madang, formerly FRIEDRICH-WILHELMSHAFEN, port, N.E. Mandated Terr. of New Guinea, Australia, on Astrolabe Bay; oil and coal in hinterland; cocoa, coffee, rubber, and other plantations being laid out; mission station; chief export, copra.

Madeira Islands (*mā-dā'ra*), or THE MADEIRAS, islands, Atlantic Ocean, about 400 m. w. of coast of Morocco. Rank as div. of Portugal. Group comprises Madeira (area, c. 270 sq. m.), Porto Santo, and three uninhabited Desertas. Surface mountainous, rising to over 6,000 ft. in Pico Ruivo; coasts steep and rocky; favourite health resort. Exports fruits, wines, vegetables, sugar, tobacco; Madeira wine is well known, and is made from mixed white and black grapes. Porto Santo is a hilly

island, with practically no products; it was visited by Columbus. Fisheries are valuable. Whole group is part of submarine range of volcanic mountains. Chief tn., Funchal. Area, 314 sq. m.; pop. 180,000.

Madelley (*mād'li*), par. in bor. of Wenlock, Shropshire, England; coal and ironstone mines; large beds of potters' clay. Pop. 7,300.

Madison, cap. of Wisconsin, U.S.A.; in 'four-lake' region between Lake Michigan and R. Mississippi; manufactures agricultural implements, machinery, boots and shoes, electric appliances; univ. Pop. 58,000.

Mad'ia, residency, E. Java, Dutch E. Indies; fertile plains with hills in s.; chief crops rice, sugar-cane, maize, coffee, coconuts, teak. Cap. Madiun. Area, 2,354 sq. m.; pop. 1,700,000.

Madras. (1) Presidency, India; occupies whole width of Indian peninsula s. of R. Kistna and its tributary Tungabhadra, and extends n. along E. coast as far as Lake Chilka; low coastal strip on each side rises by E. and W. Ghats to great central tableland, sloping up from 1,000 to 3,000 ft. Coast-line on E. c. 1,200 m., on W. c. 450 m. No natural harbour of importance. Drained by rivs. Godavari, Kistna, Cauvery, and other streams. Climate very varied. Produces large crops of cotton and tobacco; also rice, millet, wheat, barley, pulse, ground-nuts, oil-seeds, sugar-cane, spices, indigo, coconuts, areca nuts, dates; on hills, tea, coffee, cinchona, cardamoms are grown; valuable forests of teak, ebony, rosewood, sandalwood, and redwood. Exports raw cotton, seeds, rice, tea, spices, indigo, oil. Chief tns., Madras (cap.), Madura, and Trichinopoly. Area, excluding Indian states, 142,260 sq. m.; pop. 42,300,000. (2) Cap. and chief port of above; grew up round Fort St. George, founded 1639; handicapped by surf, but great breakwaters render harbour more secure. Commercial part, George Town, is on shore; Europeans live farther inland; univ.

(3,601)

Chief industries, cotton spinning, engineering, and cigar making; exports tea, coffee, cotton, sugar, dyestuffs, grain, hides, indigo. Pop. 527,000.

Madre de Dios (*mā' drā dā dē' os*), dep., E. Peru, S. America; mountainous; immense forests; gold and silver. Cap. Maldonada, 200 m. N.E. of Cuzco. Area, 58,827 sq. m.; pop. c. 5,000.

Madrid. (1) Prov., New Castile, Spain, in R. Tagus basin; climate arid; agriculture; granite, lime, gypsum, and freestone quarried. Area, 3,084 sq. m.; pop. 1,160,000. (2) Cap. of Spain and of above prov., on R. Manzanares, in centre of great sandy plateau over 2,100 ft. above sea-level, subject to extremes of heat and cold. Univ., with observatory and magnificent library. Contains royal palace, royal picture gallery with paintings by Velazquez, Rubens, Titian, and other masters. Manufactures leather goods, tobacco, furniture, tapestry, glass, chemicals, soap, porcelain, gold and silver work. Pop. 817,000.

Madura (*mā-doo' rā*). (1) Mountainous isl., Dutch E. Indies, N.E. of Java, from which it is separated by the Strait of Madura; mostly plain; considerable areas wooded; rice, maize, coconuts, fruit, vegetables; fishing and cattle rearing; salt largely produced. Area, 2,189 sq. m.; pop. 1,800,000. (2) Dist., s. Madras, India; mountainous in n. and w.; elsewhere level and fertile; coffee, rice, cotton, tobacco. Area, 4,907 sq. m.; pop. 2,007,000. (3) Cap. of above dist., on R. Vaigai; contains remarkable temple; coffee industries, brass working, wood carving, and weaving of muslin. Pop. 139,000.

Maesteg (*mīs'teg*), urb. dist., Glamorganshire, Wales, 14 m. S.W. of Merthyr Tydfil; coal mining and ironworks. Pop. 25,600.

Mafeking, tn., Brit. Bechuanaland, S. Africa, 150 m. W. of Pretoria; noted for its defence (1899-1900) by Baden-Powell in the Boer War; stock fairs; important rly. depot. Pop. c. 5,200 (1,800 whites).

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Magallanes (*ma-gal-yā'nes*). (1) Terr., S. Chile, S. America; stretches to Cape Horn and includes a multitude of islands and w. half of Tierra del Fuego; mountainous and forest-clad; coal and gold found; sheep rearing; great expt. chilled mutton and wool. Area, 46,430 sq. m.; pop. 36,000. (2) Formerly PUNTA ARENAS, cap. of above, on Strait of Magellan; most s. town of S. America; formerly a convict station; exp. chilled mutton and wool. Pop. 27,000.

Magdala (*mag'dala*), tn. and hill fort, central Abyssinia; stormed by British under Napier (1868). Pop. over 3,000.

Magdale'na. (1) Riv., Colombia, rises in Andes Mts., flows n. between Eastern and Central Cordilleras, and enters Caribbean Sea. Navigable for 900 m.; length, 1,000. (2) Dep., Colombia, S. America; plain with hills to s., watered by R. Magdalena. Produces coffee, cotton, ivory nut palms, and rubber trees. Cap. Santa Marta. Area, 19,080 sq. m.; pop. 277,000.

Magdeburg (*mag'de-boorg*), cap., Saxony, Prussia, on R. Elbe; was prominent member of Hanseatic League. Great railway centre; iron-works; enormous trade in sugar and chicory; also deals in grain, chemicals, chocolate, pottery, cotton and silk goods; distilling and brewing. Pop. 294,000.

Magellan, STRAIT OF (*mā-jel'an*), sea-passage between S. America and Tierra del Fuego; discovered by Magellan (1520); navigation difficult for sailing vessels; chief port, Punta Arenas. Length, 360 m.; breadth, $2\frac{1}{2}$ to 17 m.

Magenta (*ma-jen'tā*), tn., Lombardy, Italy, 16 m. w. of Milan; silk and matches. Pop. 9,900.

Maggiore (*mā-jō'ri*), LAKE, N. Italy and Swiss canton of Ticino; traversed by Ticino R.; has beautiful group of Borromean Islands; wellstocked with fish. Length, 40 m.; breadth, $5\frac{1}{2}$ m.; area, 83 sq. m.

Magh'era, mkt. tn. and par., co. Londonderry, N. Ireland, 20 m. s. of

Coleraine; linens and sewed muslins. Pop. (par.) 6,600.

Magherafelt, par. and mkt. tn., co. Londonderry, N. Ireland, 26 m. s. of Coleraine; manufactures linen. Pop. (par.) 4,000.

Magwe'. (1) Dist., Upper Burma; plain in w., forested upland in e.; rice, maize, cotton; petroleum wells. Area, 3,687 sq. m.; pop. 423,000. (2) Chief tn. of above, on R. Irrawaddy. Pop. 8,000.

Mahabaleshwar (*mā-hā-bul-esh-wur*), hill station, W. Ghats, Bombay, India; sacred as source of Kistna R. Pop. 5,000.

Mahanad'i ('great river'), river, India; rises in Bastar Mts. and flows generally e. to Bay of Bengal; useful for irrigation. Length, 520 m.

Mahanoy' City, tn., Pennsylvania, U.S.A., 56 m. n.e. of Harrisburg; anthracite mining; foundry products, shirts. Pop. 16,000.

Mahé (*mā-ā*). (1) Port and Fr. settlement, w. Madras, India; coal-mining station; fishing; vanilla. Pop. 11,000. (2) Largest of Seychelle Islands, Indian Ocean. Chief tn., Victoria, cap. of Seychelles. Area, 56 sq. m.

Mahedia (*mā-he-dī'a*), port, Tunisia, Africa; manufactures olive oil. Pop. 8,000.

Maid'enhead, mkt. tn. and munic. bot., on R. Thames, Berks, England; grain mills, breweries; riverside resort. Pop. 17,500.

Maid'stone, co. tn., Kent, on R. Medway, England; hops and fruit dist.; breweries, paper and oil mills; cement and lime works. Pop. 42,300.

Main (*mīn*), riv., Germany, joins R. Rhine opposite Mainz; navigable to junction with R. Regnitz. Connected with R. Danube by Ludwig's Canal. Length, 310 m. Chief tns. on banks, Würzburg, Frankfurt.

Maine, extreme n.e. state of U.S.A. and of New England states, bounded n. and e. by New Brunswick, s. by the Atlantic Ocean, w. by New Hampshire and Quebec; coast much indented, giving coast-line of 2,500 m.;

surface generally undulating, rising, towards centre of state, to 5,300 ft.; drained by Saco, Androscoggin, Kennebec, Penobscot, St. Croix, St. John, and other streams; contains great number of large lakes, including Moosehead. Climate is severe in winter and cool in summer. Northern districts forested, producing timber, bark, maple sugar; agriculture important industry, oats, maize, buckwheat, potatoes, and hay; horses, cattle, sheep, and pigs. Excellent fisheries; fish canning important. Manufactures cottons, woollens, paper, flour, clothing, boots, leather. Largest tn., Portland; cap. Augusta. Area, 33,040 sq. m.; pop. 768,000.

Maine-et-Loire (*mān-ā-lwār*), dep., n.w. France; formed part of anc. Anjou; surface hilly; traversed by R. Loire and its trib. R. Maine; soil generally fertile—produces grain, flax, hemp, wine, fruits; linen, cotton, and woollen manufactures. Cap. Angers. Area, 2,811 sq. m.; pop. 478,000.

Mainland. (1) Or POMONA, largest isl., Orkney, Scotland; Kirkwall Bay and Scapa Flow, 2 m. apart, divide it into two unequal portions, w. part being larger; moorland with fertile tracts and good trout lochs; Kirkwall and Stromness are chief tns.; Standing Stones at Stenness. Area, 190 sq. m.; pop. 14,000. (2) Largest of Shetland Islands. Chief tn., Lerwick. Area, over 400 sq. m.; pop. 18,300.

Mainz, or MAYENCE (*mints*), tn., Hesse, Germany, on R. Rhine, below influx of R. Main; busy river port; preserves, machinery, furniture, leather, chemicals; headquarters of Rhenish wine trade; printing industries; birthplace of Gutenberg, who invented movable type. Pop. 109,000.

Mait'land, EAST AND WEST, two adjoining towns, New South Wales, 20 m. n.w. of Newcastle; centre of fertile agricultural dist.; coal in vicinity. Pop. 13,000.

Major'ca, largest of Balearic Islands, Spain, in Mediterranean Sea; climate relaxing; mountainous in n.w.; soil

very fertile; grain, oil, wine, fruits in abundance; cattle rearing; marble and slate quarried. Cap. Palma. Area, 1,430 sq. m.; pop. 270,000.

Maju'ba, hill, Drakensberg range, n.w. Natal, S. Africa; alt. 2,000 ft. above surrounding land; scene of Brit. defeat by Boers (Feb. 27, 1881).

Mako (*mō'ko*), tn., Hungary, 19 m. E. Szeged; chiefly agricultural; onions largely grown; flour. Pop. 37,000.

Mak'ran, prov., Baluchistan, bordering sea; mountainous with narrow valleys; agriculture in fertile valleys; dates. Area, 26,000 sq. m.; pop. 78,000.

Mak'war, site of dam, The Gezira, Anglo-Egyptian Sudan, Africa, on R. Blue Nile, above Sennar and 170 m. S. of Khartoum; by means of dam (1914-26) c. 1,000 sq. m. of Gezira will ultimately be irrigated for cotton and other crops.

Malabar', mar. dist., Madras, India; slopes from W. Ghats to Indian Ocean and stretches 145 m. along w. coast; diversified surface; monsoon rainfall unailing; extensive forests; rice, coconuts, coffee, pepper; fisheries. Cap. Calicut. Area, 5,792 sq. m.; pop. 3,099,000.

Malabon', tn., Luzon, Philippines, 3 m. N. of Manila; sugar refining; cigars and perfume. Pop. 22,000.

Malac'ca. (1) Colony, Malay Peninsula; largest of Straits Settlements; undulating surface; tropical products. Area, 780 sq. m.; pop. 153,000. (2) Cap. of above; free port; exports rice, tapioca, spices, rubber. Pop. 20,000. (3) STRAIT OF, separating Malay Peninsula from Sumatra and adjacent islands; 550 m. long; width, 35 to 185 m.

Mal'aga. (1) Prov., S. Spain, forming part of anc. kingdom of Granada; mountainous in S.; plain in N.; watered by R. Guadalquivir; very fertile; mining, agriculture, wine; fisheries. Area, 2,812 sq. m.; pop. 564,000. (2) Port, cap. of above, on Mediterranean; manufactures flour, cotton, sugar, leather, chemicals; exp. fruit, wine, lead. Pop. 160,000.

Mälar (*mā'lar*), lake, Sweden; discharges into Baltic Sea, through Stockholm, and by Södertelge Canal; numerous islands; surface 1 to 2 ft. above sea-level; 80 m. long. Area, 650 sq. m.

Malatia (*mā-lā-tē'ā*), tn., E. Asia Minor, 110 m. N.W. of Diarbekr; fruit culture, opium; suffered from earthquake (1893). Pop. 75,000.

Malay Archipelago. See EAST INDIES.

Malay Peninsula, a long narrow peninsula extending from Indo-China southward towards Sumatra, and forming extreme s. of mainland of Asia. Properly it extends from head of Gulf of Siam, with length of c. 900 m.; width, 45 to 210 m. See further under MALAY STATES and SIAM.

Malay States, under Brit. protection and comprising a large portion of the Malay Peninsula, include the Federated States of Pahang, Perak, Selangor and Negri Sembilan, and the Non-federated States of Kedah, Kelantan, Perlis, and Trengganu; while Johore, in extreme s. of the peninsula, has its foreign relations controlled by Britain. Surface generally flat along coast, hilly inland, as the mountain range that traverses whole peninsula passes down to w. of centre. Federal cap. Kuala Lumpur, in Selangor. Federated States: total area, 27,500 sq. m.; pop. 1,325,000. Non-federated States: total area, 22,855 sq. m.; pop. 1,162,000. See articles on each state.

Mal'da, dist., Bengal, India, lying along l. bk. of R. Ganges; cereals, oil-seeds, indigo, mangoes; silk and indigo industries. Area, 1,833 sq. m.; pop. 986,000.

Mal'den, tn., Massachusetts, U.S.A.; residential suburb of Boston; manufactures rubber goods, furniture, and hosiery. Pop. 58,000.

Mal'dive Islands, chain of thirteen coral islands in Indian Ocean, 450 m. W. of Ceylon, of which they are a dependency; chief products, coir, cowries, coconuts, fruit, and nuts. Pop. over 70,000.

Mal'don, mkt. tn., river port, Essex, England, on R. Blackwater; iron foundries; agricultural implements; oyster fisheries. Pop. 6,600.

Mallines (*ma-lēn'*), or MACHLIN, city, Antwerp, Belgium; manufactures furniture, linen, woollen goods, oil; formerly famous for lace; important rly. jn.; extensive railway works. Pop. 60,000.

Mal'laig, vil., s.w. Inverness-shire, Scotland, on Sound of Sleat; terminus of W. Highland Rly.; trade in fish.

Mal'low, wat.-pl., co. Cork, I.F.S., on R. Blackwater; warm mineral springs; salmon fishing; condensed milk; flour mills, tanneries. Pop. 4,600.

Malmédy (*māl'mā-dē*), tn., Liège, Belgium; tanning, dyeing, paper-making; ceded to Belgium after Great War. Pop. 4,700.

Malmesbury (*mālmz'bury*), mkt. tn. and munic. bor., Wilts, England, on R. Avon; fine market cross; lace and silk manufactures. Pop. 2,300.

Mal'mö, port, Sweden, on Sound; ironworks, cotton and woollen mills, breweries; gloves; tobacco; ferry connection with Copenhagen. Exp. dairy produce, live-stock, matches, timber products. Pop. 119,000.

Mal'ta, isl. in Mediterranean Sea, s. of Sicily; about 58 m. from Sicily; E. and N.E. coasts are broken, with good inlets; along s., cliffs are c. 400 ft. high, and highest point of island is c. 800 ft. Brit. crown colony (including islands of Gozo and Comino) and principal Brit. naval station in Mediterranean; strongly fortified. Great coaling station and port of call. During Great War was base for troops engaged in the East, and had extensive hospital accommodation. About half island is under cultivation; produces cotton, potatoes, fruits, onions, cereals, honey; cattle, sheep, and goats reared; fishing. Manufactures lace, filigree, pottery. Has 8 m. of rly. Cap. Valetta. Area, 95 sq. m.; with Gozo and Comino, 122 sq. m.; pop. 231,000.

Mal'ton, tn., N. Riding, Yorks, Eng-

land, on R. Derwent, 17 m. N.E. of York; comprises New Malton, Old Malton, and Norton; corn mills, breweries, foundries, implementworks. Pop. 4,400.

Malvern (*maul'vern*), or GREAT MALVERN, wat.-pl., on slope of Malvern Hills, Worcestershire, England; comprises town of Great Malvern and several villages; has a priory church, a college, and several hydropathic establishments; mineral springs. Pop. (dist.) 15,600.

Man, ISLE OF, isl. in Irish Sea, 10 m. from Wigtownshire, 28 from Cumberland, 38 from Ireland; surface undulating, sloping up from rocky coast to central ridge, which reaches 2,024 ft. in Snaefell; popular holiday resort. Administration is carried out by lieut.-gov., council, and House of Keys. Chief industries are fishing, agriculture, mining; live-stock is raised, and oats and turnips are important crops. There is considerable mineral wealth, salt, lead, zinc, copper, and silver being mined. Chief tns. are Douglas (cap.), Ramsey, Castletown, and Peel. Area, 236 sq. m.; pop. 49,300.

Mannar (or MANNAR), GULF OF, inlet between Ceylon and India; pearl fisheries.

Manabi (*mā-nā-bē'*), coast prov., Ecuador, S. America; flat in w., hilly in e.; produces cacao, sugar. Cap. Puertoviejo. Area, 7,892 sq. m.; pop. 100,000.

Manacor (*ma-na-hōr*), tn., isl. of Majorca, Balearic Islands, Spain; stalactite caves; summer resort; wine. Pop. 13,000.

Managua (*mā-nā'gwā*). (1) Cap., Nicaragua, Central America, on Lake Managua; exports coffee; trade centre; univ. Severe earthquake, 1931. Pop. 33,000. (2) Lake in Nicaragua; 38 m. long, 16 m. wide; area, 438 sq. m.

Mannos (*ma-nā'os*), city and port, Brazil, on R. Negro, near its junction with R. Amazon; important centre of river trade; exports rubber, Brazil nuts, fish, hides. Pop. 76,000.

Manche (*monsh*), mar. dep., N.W. France, on English Channel; surface hilly; cereals, flax, hemp, cider apples, pears cultivated; horses reared; cider manufactured; fisheries, dairy produce. Cap. Saint-Lô; on N. coast is Cherbourg. Area, 2,475 sq. m.; pop. 431,000.

Manchester. (1) City, co. bor., S.E. Lancs, England; centre of great manufacturing district; great staple is cotton—spinning, weaving, bleaching, printing—Manchester being central market for cotton trade; there are also works that deal with silk and almost every description of fibre; engineering, and chemical and dye works; rubber and paper industries. Manchester Ship Canal, opened in 1894, converted city into fourth port in British Isles. Modern buildings include town hall, Victoria Univ., Royal Exchange, Rylands Library, new Royal Infirmary. The art gallery has a number of pre-Raphaelite paintings. Pop. 766,300. (2) Largest city in New Hampshire, U.S.A., on R. Merrimac; extensive manufactures of cotton and woollen goods, boots, shoes, cigars, machinery, locomotives. Pop. 77,000. (3) Tn., Connecticut, U.S.A., 8 m. E. of Hartford; silk goods. Pop. 18,000.

Manchuria (*man-choo're-a*), large terr. of N.E. China; almost entirely in basin of R. Sungari, trib. of Amur R., which forms N. and N.E. frontier; surface generally mountainous; chief industries, agriculture (soya beans, millet, wheat, rice) and cattle rearing; rich in minerals, including gold, iron, coal; valuable forests. Cap. Mukden. Area, 363,610 sq. m.; pop. 24,521,000.

Man'dalay, tn., Upper Burma, formerly cap., on R. Irrawaddy; contains the royal palace; silk weaving. Pop. 149,000.

Man'di, Indian hill state, Punjab, India, in R. Beas basin; hilly with fertile valleys; salt, rice, maize, sugarcane. Area, 1,200 sq. m.; pop. 185,000.

Manfredonia, tn., S.E. Italy, on Gulf of Manfredonia; cathedral;

trade in grain, almonds, figs. Pop. 15,000.

Mangalore (*mang-ga-lôr'*), port, Malabar coast, Madras, India; rly. terminus; exports coffee, timber, tiles, salted fish, spices. Pop. 54,000.

Mangotsfield, urb. dist., Glos, England, 5 m. N.E. of Bristol; coal mining. Pop. 11,300.

Manhat'tan Island, island, 13 m. long, and from $\frac{1}{2}$ to $2\frac{1}{2}$ m. broad, at mouth of R. Hudson, U.S.A.; it constitutes the borough of Manhattan in city of New York. Area, 22 sq. m.; pop. 1,945,000.

Manihiki (*ma-nê-hê'hê*), group of coral islands, Pacific Ocean, N.E. of Samoa; dependency of New Zealand; copra, guano. Pop. over 1,000.

Manil'a, port and cap., Philippine Islands, on s.w. coast of Luzon; cathedral and archbishop's palace, univ., and mint. Fine harbour; important commercial centre; exports Manila hemp (much used for cordage), rice, cigars, sugar, copra, coffee, indigo, dyewoods, mother-of-pearl, tortoiseshell. Pop. 285,000.

Manipur. (1) Indian state, N.E. India, bordering on Assam and Burma; mountainous, extensive valley in centre; forested; produces rice, fruits, cotton; famous breed of ponies. Area, 8,456 sq. m.; pop. 384,000. (2) Or IMPHAL, cap. of above, 240 m. N.N.W. of Mandalay. Pop. 80,000.

Manis'a, tn., Asia Minor, 20 m. N.E. of Smyrna; commercial centre; cotton and silk manufactures. Pop. 92,000.

Manistee', city, summer resort, Michigan, U.S.A., on L. Michigan; lumber and salt manufactures; fruit culture. Pop. 12,000.

Manitô'ha, prov., Canada, bounded E. by Hudson Bay, Ontario, S. by U.S.A., W. by Saskatchewan, N. by Keewatin; surface is generally undulating; many large lakes, including Winnipeg, Winnipegosis, Manitoba, Island, South Indian, and Etawney; drained by Rs. Churchill, Nelson, Winnipeg, Red, Saskatchewan, and

other rivs. Great wheat-growing province; other cereals produced; live-stock raised, dairy farming carried on; coal in south; gypsum deposits; valuable fisheries. Cap. Winnipeg. Area, 251,832 sq. m.; pop. 639,000.

Manitowoc' ('spirit land'), city, Wisconsin, U.S.A., on Lake Michigan at mouth of R. Manitowoc; ship-building yards; iron and aluminium manufactures; canned goods, flour. Pop. 18,000.

Manizal'es, city, Colombia, S. America, 100 m. N.W. of Bogota; exports coffee and cocoa. Pop. 85,000.

Mankat'o, city, S. Minnesota, U.S.A., on R. Minnesota; agricultural implements; numerous mills, breweries, foundries. Pop. 12,000.

Mannar. See MANAAR.

Mannheim (*man'him*), tn., Baden, Germany, at confluence of Rs. Rhine and Neckar; at head of regular Rhine navigation and principal commercial centre of Baden; manufactures machinery, electrical plant, motor-cars, glass, chemicals, carpets. Pop. 247,000.

Manresa (*man-rê'sâ*), city, N.E. Spain, 30 m. N.W. of Barcelona; manufactures cotton, linen, woollen yarns, paper, chemicals; iron foundries. Pop. 27,000.

Mans, Le (*mân*), tn., cap. Sarthe, France, 50 m. N.W. of Tours; manufactures linen goods, chemicals, tobacco, and ironmongery. Pop. 73,000.

Mans'field. (1) Tn., Notts, England, on R. Maun; ironfounding and coal mining; manufactures hosiery, lace, thread, boots. Pop. 46,100. (2) City, Ohio, U.S.A., 67 m. S.W. of Cleveland; agricultural implements, machinery, paper, rubber goods. Pop. 33,000.

Mansfield Woodhouse, urb. dist., Notts, England, 11 m. N. of Mansfield; Roman remains; stone quarries. Pop. 13,700.

Mansur'a, tn., cap. Daqahlia, Nile Delta, Egypt; centre of cotton industry; linen and sailcloth factories. Pop. 64,000.

Mantes (*mânt*), tn., Seine-et-Oise, France, on R. Seine; trade in agricultural produce; musical instru-

ments, baskets, brushes, hosiery. Pop. 10,000.

Mantua (*man'tū-a*). (1) Prov., Lombardy, Italy; low, level, and fertile; produces cereals, rice, vines, and mulberry trees; cattle breeding carried on. Area, 903 sq. m.; pop. 381,000. (2) Cap. of above, on R. Mincio, 22 m. S.S.W. of Verona; engine shops, tanneries, breweries; manufactures cellulose for paper and artificial manures. Birthplace of Virgil. Pop. 44,000.

Manzanares (*mān-thā-nā'res*). (1) Tn., central Spain, 20 m. E. of Ciudad Real; manufactures soap, pottery, and bricks; saffron, wine, and wheat produced. Pop. 16,000. (2) Riv., New Castile, Spain; affluent of R. Jarama; Madrid on its banks; length, 40 m.

Manzanillo (*mān-sā-nē'yo*), port, S. Cuba, W. Indies; exports sugar, tobacco, hides, cedar, mahogany. Pop. 25,000.

Maracaibo (*mā-rā-kī'bo*). (1) City, Venezuela, S. America; important commercial centre; in centre of great oil-producing region; exports petroleum, coffee, cocoa, sugar, and rubber; shipbuilding yards. Pop. 75,000. (2) Lake, Venezuela, communicating with Gulf of Venezuela; entrance obstructed by shoals. Length, 130 m.; breadth, 60 m.

Maranhão (*mā-rān-yōw'*), maritime state, Brazil, on Atlantic Ocean; mountainous in the S.; well-watered and fertile, yielding rice, cotton, sugar, coffee, tobacco, vanilla; live-stock reared; much of it occupied by forests; minerals include copper and gold. São Luiz is cap. Area, 177,515 sq. m.; pop. 1,109,000.

Marash, tn., Asia Minor, 90 m. N.E. of Alexandretta; trade in Kurd carpets, embroideries. Pop. 30,000.

Mar'athon, plain (5 m. long, 2 m. wide), N.E. Attica, Greece, between Mount Pentelicus and the sea; celebrated as scene of victory of Miltiades over Persians (490 B.C.).

Mazari'on, mkt. tn. and wat.-pl., Cornwall, England, on Mount's Bay;

market gardening and pilchard fisheries. Pop. 1,100.

Mar'burg. (1) Tn., Hesse-Nassau, Prussia, on R. Lahn, 48 m. N. of Frankfurt; univ.; pottery, surgical instruments, iron goods. Pop. 23,000. (2) See MARIBOR.

March. (1) Mkt. tn., Isle of Ely, Cambridgeshire, England, on R. Nen, 7 m. S.S.W. of Wisbech; engineering; agricultural implements. Pop. 11,300. (2) See MORAVA (2).

Marches, dep. E. Italy, including provs. of Ancona, Ascoli, Piceno, Macerata, and Pesaro e Urbino. In W. are Apennine Mts. Chief products, maize, wine, tobacco; chief manufactures, silk, straw plait, paper. Largest tn., Ancona. Area, 3,702 sq. m.; pop. 1,219,000.

Marcianise (*mar-chā-nē'sā*), tn., Italy, 13 m. N. by E. of Naples; trades in fruit and grain. Pop. 13,000.

Marcinelle (*mar-sē-nē'*), tn., Hainaut, Belgium, 23 m. E. by S. of Mons; coalmines; steel works. Pop. 16,000.

Mardin (*mar-dēn'*), tn., Asia Minor, 50 m. S.S.E. of Diarbekr; centre of fruitful agricultural region; weaving of woollens and cottons. Pop. 22,000.

Marée', Loch, lake, W. Ross and Cromarty, Scotland; length, 12½ m.; breadth, ½ m. to 2¼ m.; has several islands; fishing.

Marée'tis, LAKE, OF BIRKET-EL-MARIUT, lagoon, Lower Egypt, separated from Mediterranean Sea by narrow ridge of sand on which is Alexandria.

Margarita (*mar-gā-rē'ta*), isl., Caribbean Sea, off Venezuela, to which it belongs; mountainous (Macanao, 4,490 ft.); pearl fishing and salt making; deposits of magnesite. Area, 400 sq. m.; pop. 69,000.

Mar'gate, munic. bor., wat.-pl., Isle of Thanet, Kent, England; popular holiday resort. Pop. 31,300.

Marghera. See under VENICE.

Margilan, tn., Ferghana, Central Asia, U.S.S.R., 150 m. S.E. of Tashkent; camel's-hair, woollen, and silk stuffs. Pop. 43,000. Nine miles S. is New Margilan. See FERGHANA.

Marianas Islands, or LADRONES, archipelago, w. Pacific Ocean; comprise ten volcanic islands, four inhabited, also four inhabited coral islands, including Guam (U.S.A. dependency). Chief export, copra. Mandated to Japan, 1919. Total area (excluding Guam) is c. 250 sq. m.; pop. c. 10,000.

Maria-Theresiopel. See SUBOTICA.

Maribor, formerly MARGBURG, tn., Slovenia, Yugoslavia, on R. Drave; leather goods, wine; large rly. workshops. Pop. 31,000.

Marie Galante (*ma-rê ga-lant'*), isl., French W. Indies, dependency of Guadeloupe; rocky plateau with fertile soil; coffee, sugar, and cotton. Chief town, Grand Bourg. Area, 55 sq. m.; pop. 23,000.

Mariénbad (*má-rê-en-bát'*), wat.-pl., w. Bohemia, Czechoslovakia; saline springs. Pop. 6,900.

Marienburg (*má-rê-en-boorg*), tn., E. Prussia, 27 m. s.e. of Danzig; sawmilling; sugar, agricultural implements. Pop. 21,000.

Mariénwerder (*ma-rê-en-ver-der*), tn., E. Prussia, Germany, near R. Vistula; iron foundries, sawmills, sugar refineries. Pop. 14,000.

Marietta, city, Ohio, U.S.A., at junction of Rs. Muskingum and Ohio; dist. rich in coal, iron, petroleum, and natural gas; foundry products, leather. Pop. 15,000.

Marinetta, city, Wisconsin, U.S.A., on inlet of Lake Michigan, 220 m. n.e. of Chicago; paper, pulp, lumber, and sawmills; good harbour. Pop. 14,000.

Mar'lon. (1) City, Indiana, U.S.A., 60 m. n.e. of Indianapolis, on R. Mississinewa; glass, iron, pulp, paper; large trade in grain. Pop. 24,000. (2) City, Ohio, U.S.A., 43 m. n.w. of Columbus; an agricultural centre; machinery; agricultural implements. Pop. 31,000.

Maritime Alps. See ALPS.

Maritime Provinces, general name for Canadian provinces on Atlantic coast—Nova Scotia, New Brunswick, and Prince Edward Island.

Mar'isa, riv. of Balkan Peninsula,

rises in Rhodope Mts., flows past Philippopolis to Adrianople, from which to its mouth it forms boundary between Turkey and Greece. Length, 300 m.

Mariupol (*ma-re-oo'pol*), port, Ukraine, U.S.S.R., on Sea of Azov; exports cereals, linseed, coal, and iron. Pop. 41,000.

Mar'ket Dray'ton, or DRAYTON-IN-HALES, tn., Shropshire, England, 18 m. n.e. of Shrewsbury; grammar school (1554); beer, agricultural machinery. Pop. 4,700.

Mar'ket Har'borough, tn., Leicestershire, England, 16 m. s.e. of Leicester; hunting centre; textiles, boots and shoes. Pop. 9,300.

Mark'inch, par. and burgh, Fife, Scotland, 4 m. s. of Ladybank; paper mills and bleachfields, distillery. Pop. (burgh) 2,000.

Marl'boro, city, Massachusetts, U.S.A., 28 m. w. of Boston; boots and shoes and shoemaking machinery. Pop. 15,000.

Marlborough (*maul'boro*). (1) Tn., Wilts, England, on R. Kennet; rope making and brewing; public school. Pop. 3,500. (2) Provincial dist., S. Island, New Zealand; in n.e. of isl.; sheltered; mainly pastoral. Chief tn., Blenheim. Area, 4,225 sq. m.; pop. 18,300.

Mar'low, tn., Bucks, England, on R. Thames; river resort; paper mills, brewing, lace, chairs. Pop. 5,100.

Marmande (*mar-mand'*), tn., Lot-et-Garonne, on R. Garonne; woollens, brandy; iron foundries. Pop. 6,500.

Mar'mara, SEA OF, separates Asia Minor from Europe; communicates by Bosphorus with Black Sea and by Dardanelles with Aegean; 117 m. long, 50 m. broad; area, 4,500 sq. m.; maximum depth, 4,250 ft.; no good harbours; largest isl. Marmara, 50 sq. m., famous for marble and alabaster.

Marne (*marn*). (1) Riv., N. France, rising on plateau of Langres (Haute-Marne), flows n.w. and w. past Châlons, Epemay, and Meaux to join Seine, 2 m. s.e. of Paris. Navigable

to St. Dizier. Scene of critical battle of Great War (1914). Length, 326 m. (2) Dep., France, bisected by R. Marne; centre, gently-rolling country; the rest, flat and monotonous; well suited for cereals and champagne; wine matured in cellars of Reims, Epernay, and Châlons (chief tn. of dep.); tanneries, iron and copper foundries, breweries, potteries, and textile mills. Area, 3,167 sq. m.; pop. 398,000.

Marne, HAUTE. See HAUTE-MARNE.

Maros-Vásárhely. See TARGUMURES.

Marple, par. and urb. dist., Cheshire, England, 9 m. S.E. of Manchester; cotton factories. Pop. 7,400.

Marquesas Islands (*mar-kā'sas*), archipelago of volcanic islands, S. Pacific Ocean; annexed to France (1842); mountainous, fertile; bananas, breadfruit, sugar-cane, copra, yams. Area, 480 sq. m.; pop. 2,500.

Marquette (*mar-ket'*), city, Michigan, U.S.A., on S. shore of Lake Superior; exports iron ore; iron smelting and manufacture of lumber; large railway works. Pop. 13,000.

Marra'kesh, or MOROCCO CITY, one of the capitals, and largest tn. of Morocco, Africa; beautiful situation; manufactures leather; centre for produce of S. Morocco. Pop. 149,000.

Marsala (*-sā'la*), port, W. Sicily; gives its name to a wine of the sherry type; brandy. Pop. 31,000.

Marsden, par. and tn., W. Riding, Yorks, England, 7 m. W.S.W. of Huddersfield; woollen, cotton, and silk factories. Pop. 5,700.

Marseilles, or MARSEILLE (*mar-sā'la'*; French *mār-sī*), chief tn., Bouches-du-Rhône, France, on Mediterranean Sea; second city and chief commercial port of France; built on four hills with background of mountains; spacious modern docks; called at by Brit. liners to India and Australia; leading articles of trade: coal, oil-seeds, grain, soap, petroleum, wine; manufactures sugar, soda, glass, tiles, tobacco, matches, soap and candles;

refines oil and has ore-smelting works. Pop. 652,000.

Marshall, city, Texas, U.S.A., 145 m. E. of Dallas; large railway shops; canning; foundries; bricks, baskets, cotton-seed oil. Pop. 14,000.

Marshall Islands, archipelago, Pacific Ocean; two groups—Radak (thirteen islands) in E., and Ralik (eleven islands) in W.; mandated to Japan; sugar-cane and cotton; exports copra. Total area, 150 sq. m.; pop. 10,000.

Marshalltown, city, Iowa, U.S.A., 48 m. N.E. of Des Moines; iron and steel; tinned foods; machinery and engines. Pop. 16,000.

Martigny (*mar-tēn-yē'*), three connected villages, Valais, Switzerland, 24 m. S.E. of L. Geneva; tourist resort; starting point for Chamonix. Pop. 5,700.

Martinique (*mar-tin-ēk'*), isl., French W. Indies, one of the Lesser Antilles; culminates in Mont Pelée (4,430 ft.); sugar, cocoa, rum, coffee, tobacco, pineapples, bananas. Chief tn. and commercial cap. Fort-de-France; St. Pierre totally destroyed by eruption of Mont Pelée in 1902. Area, 385 sq. m.; pop. 235,000.

Martinsburg, town, W. Virginia, U.S.A., 65 m. N.W. of Washington; cider and cider vinegar; hosiery and worsteds; slate and limestone; railway repair shops. Pop. 13,000.

Martin's Ferry, tn., Ohio, U.S.A., on R. Ohio; coal mining; iron and steel products. Pop. 12,000.

Mar'lock, par. and vil., Somerset, England, 7 m. N.W. of Yeovil; glove and jute-matting factories. Pop. (par.) 2,100.

Mar'tos, tn., Andalusia, S. Spain, 12 m. W.S.W. of Jaen; grain, wine, and oil. Pop. (comm.) 20,000.

Maryborough. (1) Co. tn., co. Leix, I.F.S.; market town with flour mills. Pop. 3,300. (2) Munic. tn., Victoria, Australia, 112 m. N.W. of Melbourne; railway centre; gold mining. Pop. 6,000. (3) Tn., Queensland, Australia, 180 m. N. of Brisbane; centre of Gympie gold field; coal,

timber, and sugar; engineering works. Pop. 12,000.

Maryland, South Atlantic State, U.S.A.; bounded n. by Pennsylvania, e. by Delaware and Atlantic, s. and s.w. by Virginia, w. by W. Virginia; has only about 35 m. of coast on Atlantic, but Chesapeake Bay, the Susquehanna, Patapsco, and Potomac rivs. provide harbours; surface rises to Blue Ridge dist. of Appalachians; coal mined in extreme w.; iron, chrome, copper, brick-clay, marble, soap-stone also worked; pine, chestnut, oak, hickory, and walnut trees; lumbering important. Produces tobacco, fruits, vegetables, cereals; large trade in tinned fruit and vegetables. Live-stock raised, and dairy farming carried on. Valuable fisheries, especially oysters. Manufactures cottons, woollens, iron and steel, tin wares, flour, artificial manures. Cap. Annapolis; largest tn., Baltimore. Area, 12,327 sq. m.; pop. 1,616,000.

Marylebone, Sr. (*mar'i-bin*), metropolitan bor. of n.w. London; residential dist.; contains Regent's Park, also Lord's Cricket Ground, headquarters of Marylebone Cricket Club (M.C.C.). Pop. 97,600.

Maryport, port, Cumberland, England, on Irish Sea; coal mining; ironworks, sawmills, shipbuilding; good harbour and docks. Pop. 10,200.

Masaya (*ma-s'a*), tn., Nicaragua, Central America, on Lake Masaya; tobacco, beans, sugar, coffee, and maize grown in vicinity. Pop. 14,000.

Mascara, tn., Oran, Algeria, N. Africa, 60 m. e. of Oran; white wine; trade in oil and cereals. Pop. 28,000.

Masham (*mas'am*), urb. dist., N. Riding, Yorks, England, on R. Ure, 8 m. n.w. of Ripon; sheep fair. Pop. 2,000.

Masho'naland, region, S. Rhodesia, S. Africa, between Matabeleland and R. Zambezi; plateau (alt. 3,000-5,000 ft.); gold, silver, and copper mines; maize, tobacco, citrus fruits; traversed by rly. from Salisbury to Beira. Chief tn., Salisbury. Mashonas are branch of Bantu peoples.

Ma'son City, n. Iowa, U.S.A.; cement, lime, bricks, tiles; beet sugar. Pop. 20,000.

Mas'sa, city, Tuscany, Italy, 26 m. n.w. of Pisa; centre of Carrara marble industry; paper, olive oil, tobacco. Pop. 39,000.

Massachu'setts, New England State, U.S.A., bounded n. by Vermont and New Hampshire, e. by Atlantic Ocean, s. by Atlantic Ocean, Rhode Island, Connecticut, w. by New York State; off coast are Martha's Vineyard and Nantucket islands; surface undulating, reaching height of over 3,500 ft. in w., which is occupied by Berkshire Hills, part of Appalachians; highest peak is Mt. Greylock (3,530 ft.). Drained by Rs. Housatonic, Connecticut, Millers, Merrimac, and Chicopee. Considerable area wooded, and valleys fertile; maize, potatoes, tobacco, and small fruits grown; centre of U.S.A. whale, deep-sea, and coast fishing; important centre also of commerce and export. Manufactures boots and shoes, cottons, woollens, iron and steel goods; mining is unimportant. Cap. Boston; other large tns., Worcester, Springfield, Fall River, Cambridge. Area, 8,266 sq. m.; pop. 4,290,000.

Massaw'a, fort, port, Eritrea, on coral isl. in Red Sea; pearl fishing; chief port for Abyssinia and Anglo-Egyptian Sudan; exports hides, coffee, ivory, wax. Pop. 12,000.

Mas'sillon, city, Ohio, U.S.A., 50 m. s.e. of Cleveland; coal mines; machinery, glass, enamel ware. Pop. 26,000.

Masulipatam', port, cap. of Kistna, Madras, India, on Coromandel coast; cotton manufactures; rice mills. Pop. 44,000.

Matabeleland, or **MATABILILAND**, dist., S. Rhodesia, S. Africa, on plateau sloping s. to R. Limpopo; contains Matopo Hills; fertile; cereals, sugar, cotton; forested; some gold; traversed by rly. from Bulawayo (chief tn.) to Victoria; Matabele are Zulu warriors of Bantu stock and number c. 250,000.

Matad'i, riv. port, Belgian Congo,

near mouth of R. Congo; has railway communication with Stanley Pool. Pop. 15,000.

Matamo'ros, frontier tn., Mexico, near mouth of Rio Grande; trade with U.S.A. in horses, cattle, hides. Pop. 18,000.

Matan'ras. (1) Prov., Cuba; sugar, rice, tobacco. Area, 3,256 sq. m.; pop. 348,000. (2) Port, cap. of above, 58 m. E. of Havana; exports sugar, molasses, cigars. Pop. 63,000.

Mataro', port, Barcelona, Spain, on Mediterranean Sea; textiles, chemicals, paper, soap; fisheries. Pop. 24,000.

Matera (*mā-tā-rū*), tn., s. Italy, 34 m. N.W. of Taranto; leather, oil-pressing; cave habitations. Pop. 18,000.

Matlock, wat.-pl., on R. Derwent, Derbyshire, England; hot springs; manufactures cotton and paper; urb. dist. includes Matlock Bath. Pop. 10,600.

Matopo Hills, culmination of Matabele tableland, S. Rhodesia, S. Africa, between Limpopo and Zambezi rvs.; burial-place of Cecil Rhodes and Sir Starr Jameson is called 'World's View'; 27 m. S. of Bulawayo. Length, 100 m.; breadth, 25 m.

Matsumai. See FUKUYAMA.

Matsumoto, tn., Honshu, Japan, 140 m. N.W. of Tokyo; trade in cocoons and silkworm eggs. Pop. 63,000.

Mat'terhorn, peak of the Alps, on border between Valais, Switzerland, and Piedmont, Italy; height, 14,780 ft.; an immense rock pinnacle; first ascended (1865) by Whymper.

Mat'to Grosso, a western state of Brazil, bordering on Bolivia; forms part of Brazilian plateau; traversed by several low mountain chains; much dense forest; rich in minerals; diamonds; chief industry, cattle raising. Cap. Cuyaba. Area, 532,210 sq. m.; pop. 337,000.

Mattoon', city, Illinois, U.S.A., 50 m. W. of Terre Haute; foundries, machine shops; flour, brooms, bricks, tiles. Pop. 14,000.

Maubeuge', tn., Nord, France, on R. Sambre; metal goods; machine tools; rly. jn. Pop. 22,000.

Manchline (*manch'lin*), tn. and par., on R. Ayr, Ayrshire, Scotland; curling stones; associated with poet Burns. Pop. (par.) 2,300.

Mauna Loa (*mou'na*), active volcano (13,650 ft.), Hawaii; largest in world; on E. slope is crater of Kilanea.

Mauritania, colony, French W. Africa, bounded on W. by Atlantic; mostly in Sahara; produces gum and salt; live-stock reared. Area, 154,400 sq. m.; pop. 289,000.

Mauritius (*maw-rish'us*), Brit. isl., in Indian Ocean, 500 m. E. of Madagascar; volcanic, surrounded by coral reefs; surface consists of tableland, with mountains some 2,000 ft. high. Several volcanic lakes, of which Grand Bassin is largest; hurricanes frequently occur between Dec. and April. Produces sugar, spice, vanilla, fibres, rice, coconut oil, ebony, ironwood, bamboo, aloes, benzoin. Cap. Port Louis. Area, 720 sq. m.; pop. 385,000.

Maxwelltown, tn., Dumfriesshire, Scotland, on R. Nith; woollens, hosiery; dyeworks, sawmills. Now part of Dumfries.

May, ISLE OF, isl. at entrance to Firth of Forth; 1 m. long; sheep grazing; abounds in sea-fowl.

Maysquez (*mi-á-guez*), port, Porto Rico, on W. coast; exports sugar, tobacco, coffee. Pop. 19,000.

Mayavaram', tn., on R. Cauvery, Tanjore, Madras, India; fine cloth manufactures. Pop. 24,000.

Mayhole (*mā'bōl*), tn., Ayrshire, Scotland, 9 m. S. of Ayr; boots and shoes, agricultural implements. Pop. 4,200.

Mayence. See MAINZ.

Mayenne (*mā-yen*). (1) Dep., France; surface varied and well wooded; drained by R. Mayenne, trib. of R. Loire; principal industries, agriculture, stone quarrying, cattle and horse raising; manufacture of coarse textiles. Cap. Laval. Area, 1,086 sq. m.; pop. 260,000. (2) Tn., in above, on R. Mayenne; cloth manufactures. Pop. 6,000.

Mayfield, par. and tn., Sussex, England, 17 m. N. of Eastbourne; roof tiles; ruins of palace formerly country seat of Archbishops of Canterbury. Pop. (par.) 3,500.

Maynooth, tn., Kildare, I.F.S., 12 m. W. of Dublin; seat of R.C. college for priests (founded 1795). Pop. 800.

Mayo, mar. co. of Connaught, I.F.S., bounded by Sligo, Roscommon, Galway, Atlantic Ocean; mountainous in W., flat in E.; coast much indented; drained by R. Moy; contains Lough Conn and other lakes; cattle rearing, salmon and other fisheries, linen weaving. Chief tns., Castlebar (co. tn.), Ballina. Area, 2,084 sq. m.; pop. 173,000.

Mayotte, one of Comoro Islands, in Mozambique Channel, Africa; a French possession; vanilla, sugar, cacao. Area, 140 sq. m.; pop. 12,600.

Maywood, tn., Illinois, U.S.A., on R. Desplaines, adjoining Chicago; largely residential; manufactures include tin cans, ginger ale, and locomotive supplies. Pop. 26,000.

Mazagan, port, Atlantic coast, Morocco, Africa; exports agricultural produce and eggs. Pop. 19,000.

Mazamet (*mā-zā-mā*), tn., Tarn, France, 50 m. E. of Toulouse; wool, tanning; stronghold of French Protestantism. Pop. 11,000.

Mazanderan, prov., N. Persia, between Caspian Sea on N. and Elburz Mts. on S.; mostly level; partly under cultivation; yields rice, cotton, sugar, fruits, iron ore. Area, 10,460 sq. m.; pop. 200,000.

Mazar-i-Sharif, tn., Afghanistan, 11 m. S.E. of Balkh; military centre, fortress of Takhtapul. Pop. 46,000.

Mazarrón, tn., Murcia, S. Spain, 18 m. W. of Cartagena; iron and lead mines; flour mills, soap works. Pop. 18,000.

Mazatlan, port, Mexico, on Pacific Ocean; exp. hides, gold, silver, copper, fruit, gums. Pop. 28,000.

Mazara del Vallo (*māz-sā-rā*), walled city, W. Sicily; oil, linseed, corn; sulphur springs. Pop. 22,000.

Mazzarino (*māz-sā-rē-no*), tn., cen-

tral Sicily; sulphur springs; wine; agricultural produce. Pop. 20,000.

Meadville, city, Pennsylvania, U.S.A., 40 m. S. of Erie; railway and boiler shops. Pop. 15,000.

Meath, mar. co., Leinster, I.F.S.; surface level and undulating; traversed by R. Boyne; almost entirely under pasture; coarse linens and woollen goods. Cap. Trim. Area, 903 sq. m.; pop. 63,000.

Meaux (*mō*), tn., Seine-et-Marne, France, 25 m. N.E. of Paris; has 12th cent. cathedral; trade in cheese, corn, eggs, and poultry. Pop. 12,000.

Mecca, cap. of Hejaz and Nejd, Arabia; sacred city of Mohammedans; Mohamud was born here about 571. Principal building is Great Mosque, in which is the Kaaba, a small oblong building containing the sacred black stone, towards which all Moslems turn in worship. Pop. 85,000.

Mechlin. See MALINES.

Mecklenburg, region, N. Germany, consisting of two republics, Mecklenburg-Schwerin and Mecklenburg-Strelitz, at W. end of Baltic Sea, along which there is coast-line of c. 66 m.; surface flat, with low ridge in centre; numerous lakes; produces cereals, amber; manufactures beet sugar, beer, spirits, leather; is famous for sheep, cattle, pigs, horses. Mecklenburg-Schwerin, cap. Wismar. Area, 5,066 sq. m.; pop. 674,000. Mecklenburg-Strelitz, cap. Neu-Strelitz. Area, 1,131 sq. m.; pop. 110,000.

Medellín (*mā-del-yén*), tn., Colombia, S. America, 150 m. N.W. of Bogota; univ.; commercial centre; manufactures cotton and woollen goods, cigars and cigarettes, hats, crockery, matches. Pop. 120,000.

Medford, tn., Massachusetts, U.S.A., residential suburb of Boston; manufactures chemicals, bricks, machinery, woollens. Pop. 60,000.

Medicine Hat, tn., S.E. Alberta, Canada, on S. Saskatchewan R.; rly. jn.; coal mines, natural gas supplies; flour mills. Pop. 10,000.

Medina (*me-dē-na*), tn., Hejaz, Arabia; second great holy city of the

Mohammedans; contains tomb of Mohammed; strongly fortified; principal building is mosque; railway opened to Damascus in 1908. Pop. 30,000.

Medinet. See FAIYUM.

Mediterranean Sea, great inland sea, with Europe on N., Asia on E., Africa on S.; communicating with Atlantic by Strait of Gibraltar, with Black Sea by Dardanelles, Sea of Marmara, and Bosphorus; with Red Sea by Suez Canal; uninfluenced by oceanic tidal wave; three basins of great depth revealed by soundings—viz., western basin, W. of Corsica and Sardinia, greatest depth, 10,322 ft., W. of Sardinia; Tyrrhenian depression, between Corsica and Sardinia, Sicily and Italy; eastern basin, between S. Italy and coast of Palestine; greatest depth, the Pola Deep (14,436 ft.), lying between Malta and Crete. Submerged mountains, known as the Adventure Bank, connect Sicily with Tunis. Owing to great evaporation, salinity of Mediterranean is slightly greater than that of the Atlantic, and the deep blue colour of its waters is well known. There is a constant surface current from Atlantic into Mediterranean, and also one from Black Sea. Chief islands are Balearic, Sardinia, Corsica, Sicily, Crete, Cyprus. Many species of fish inhabit the waters, and the sponge, tunny, and sardine fisheries are important. Greatest length, 2,330 m.; greatest breadth, 495 m. Area, 1,145,000 sq. m.

Medoc, dist., Gironde, France, along R. Gironde; famous wines.

Med'way, riv., Kent, England; head-streams rise in Sussex and in Surrey; at Sheerness enters R. Thames by estuary 12 m. long. Tns. on banks: Tonbridge, Maidstone, Rochester, Chatham. Length, 60 m.

Meerane (*mā-ra'na*), tn., Saxony, Germany, 27 m. N.W. of Chemnitz; centre of cloth and woollen trade; dyeing and tanning. Pop. 24,000.

Mee rut. (1) Dist., United Provinces, India; between Rs. Ganges and Jumna; well forested; maize, wheat,

sugar-cane, pulses. Area, 2,354 sq. m.; pop. 150,000. (2) Cap. of above; scene of outbreak of Indian Mutiny (1857). Pop. 123,000.

Meiderich. See DUISBURG.

Meiktil'a, dist., Mandalay, Burma; rolling plain with low rainfall; rice, cotton, ground-nuts, peas, maize. Area, 2,287 sq. m.; pop. 290,000.

Meiningen (*mī'ning-en*), tn., S.W. Thuringia, Germany, on R. Werra; breweries, foundries; pottery, paper, chemicals. Pop. 18,000.

Meissen (*mī'sen*), tn., Saxony, Germany, on R. Elbe; noted for manufacture of 'Dresden china'; foundries, textile mills, earthenware, glass, explosives, matches. Gothic cathedral. Pop. 45,000.

Mek'nes, or MEQUINEZ, one of the caps. of Morocco, 36 m. W. by S. of Fez; centre of fertile dist. with olive plantations. Pop. 25,000.

Mekong (*mā-kong*), riv., Indo-China; rises in Tibet; separates Annam and Siam; enters China Sea by two great arms; length, 2,800 m.

Melane'sia ('islands of the blacks'), collective name for chain of island groups in Pacific Ocean, curving round from New Guinea, comprising New Britain, Solomon, Santa Cruz, New Hebrides, New Caledonia, Loyalty, and other archipelagos. Inhabited by distinct Negro race known as Melanesians.

Melbourne (*mē'burn*). (1) Cap., Victoria, Australia; observatory, mint, univ.; fine parks and public gardens; great gold, wool, and farm-produce centre; fine harbour; exports frozen meat, wool, dairy produce, fruit, wine, grain. Pop. 1,000,000. (2) Tn. and par., Derbyshire, England, 7½ m. S.E. of Derby; market gardens; thread, silk, boots. Pop. (par.) 3,600.

Melilla (*mē'līl'yā*), fort. port, and Spanish convict settlement, N. coast of Morocco; exports hematite, lead, zinc. Pop. 61,000.

Melks'ham, mkt. tn. and urb. dist., Wilts, England, on R. Bristol Avon; dairy-farming dist.; manufactures woollen goods, cordage, horsehair

cloth; has engineering and rubber works. Pop. 3,900.

Melos. See **MIL0**.

Melrose. (1) Mkt. tn., Roxburghshire, Scotland, on R. Tweed; dist. associated with Sir Walter Scott; ruins of Cistercian abbey (1136); holiday resort. Pop. 2,100. (2) City, Massachusetts, U.S.A.; suburb of Boston; manufactures rubber shoes, silver goods. Pop. 20,000.

Meltham, urb. dist., W. Riding, Yorks, England, 3 m. s.w. of Huddersfield; woollen, cotton, thread mills. Pop. 5,100.

Melton Mowbray (*mō'brā*), tn., N.E. Leicestershire, England; a hunting centre; pork pies, Stilton cheese. Pop. 10,400.

Melun (*mā-lun'*), chief tn., Seine-et-Marne, France, on R. Seine; agricultural implements, leather; mkt. for farm produce. Pop. 14,000.

Memel. See **KLAIPEDA** and **NIE-MEN**.

Memmingen, tn., s.w. Bavaria, Germany; machinery, emery cloth, ropes, textiles. Pop. 14,000.

Memphis. (1) Anc. tn. of Egypt, 12 m. s. of Cairo; once cap., now in ruins. (2) Tn., Tennessee, U.S.A., on R. Mississippi; great export of cotton; riv. centre; lumber, oil, cotton seed and cake, foundry products. Pop. 252,000.

Menai Strait (*men'ī*), channel between Anglesey and Carnarvonshire, Wales, from $\frac{1}{2}$ to 2 m. wide; 14 m. long; crossed by road suspension bridge and Britannia Tubular Bridge (railway).

Menam (*mā-nām'*), or **MENAM CHAO BHRAYA**, riv., Siam, flows by several mouths into Gulf of Siam; length, c. 900 m.; great highway of trade; Bangkok stands near mouth.

Mende (*mond*), chief tn., Lozère, France, on R. Lot; manufactures serges and shalloons. Pop. 6,000.

Men'dip Hills, range of hills, Somersetshire, England; highest point, Blackdown (1,067 ft.); numerous caverns and 'swallow-holes.'

Mendoza (*men-dō'thā*). (1) Prov.,

Argentina, S. America; mountainous in w.; drained by R. Mendoza and other rivs.; coal, petroleum; cereals, alfalfa, tobacco, wine. Area, 56,502 sq. m.; pop. 397,000. (2) Cap. of above; produces wine, fruit; on railway from Buenos Aires to Valparaiso. Pop. 59,000.

Menin, tn., W. Flanders, Belgium, on R. Lys; textiles, rubber goods, soap; flax and tobacco cultivated in neighbourhood. Pop. 19,000.

Menom'inee ('wild rice'), city, Michigan, U.S.A., on Green Bay; ships lumber, paper, pulp, beet sugar, electrical machinery. Pop. 11,000.

Men'ston, par., vil., Yorks, England, 12 m. n.w. of Leeds; bleach-works, stone quarries. Pop. (par.) 3,800.

Mentā'wai, group of islands off w. coast of Sumatra, Dutch E. Indies; thickly forested; tobacco, sugar-cane, coconuts. Pop. 8,000.

Menteith (*men-tēth*), LAKE OF, lake, s.w. Perthshire, Scotland; contains three islets, to one of which, Inchmahome, Mary Queen of Scots was sent after battle of Pinkie (1547).

Mento'ne (French, *Menton*), tn., Alpes-Maritimes, France; popular winter resort of Riviera; trade in olive oil, wine, and perfumes. Pop. 20,000.

Menzies (*men'zēs*), tn., W. Australia; trade centre of the N. Coolgardie and Mount Magnet goldfields. Pop. 2,500.

Mep'pel, tn., Drenthe, Holland; important trade in butter, eggs, cattle; dyeing; shipbuilding. Pop. 12,000.

Mequinez. See **MEXNES**.

Merano (*mā-rā'no*), tn., Tyrol, N. Italy, 42 m. n. of Trent; health resort. Pop. 19,000.

Mergui (*mer-gē*). (1) District, Tenasserim, Lower Burma; rich in timber, especially teak; tin found, but little worked. Area, 9,790 sq. m.; pop. 135,000. (2) Port, cap. of above; pearl fishing of Mergui Archipelago centred here; exports salted fish, rubber, tin. Pop. 17,000.

Mergui Archipelago, group of islands, Bay of Bengal, Lower Burma; moun-

tainous; covered with teak trees; rice and other crops; great pearl-fishing area.

Merida (*mer'e-da*). (1) City, Badajoz, Spain, on R. Guadiana; Roman antiquities; rly. jn. Pop. 16,000. (2) Tn., Venezuela, near L. Maracaibo; manufactures woollen and cotton goods. Pop. 16,000. (3) City, cap., Yucatan, Mexico; univ.; centre of sisal-hemp industry; manufactures ropes, soap, cigars, and brandy. Pop. 79,000.

Meriden, city, Connecticut, U.S.A., 18 m. N. of New Haven; silver and silver-plate, hardware, cut glass. Pop. 38,000.

Meridian, city, E. Mississippi, U.S.A.; has machine shops, lumber and grist mills, foundries, cotton and oil mills; important rly. jn. Pop. 33,000.

Merioneth, coast co., N. Wales; surface rugged, reaching over 2,900 ft.; among highest peaks is Cader Idris; drained by rivs. Dee, Dovey, and other streams. Has excellent breed of ponies; sheep reared; slate and limestone quarries; manufactures woollens. Cap. Dolgelly. Area, 660 sq. m.; pop. 43,200.

Mersea, island, Essex, England, between estuaries of Rs. Colne and Blackwater; noted for oysters; protected by strong sea-wall.

Merseburg, tn., Saxony, Prussia, on R. Saale, 9 m. S. of Halle; cathedral; one of oldest towns in Germany; tanning, brewing, metal founding; market gardening. Pop. 26,000.

Mersey, riv., England; rises in Derbyshire; flows W.; joined by Irwell; enters Irish Sea by estuary 18 m. long; ranks next to Thames in commercial importance. Chief port, Liverpool. Length, 70 m.

Mersina (*mer-sē'na*), port, Adana, S. Asia Minor; exports cotton, wool, cereals, fruit, timber. Pop. 46,000.

Merstham, par. and vil., Surrey, England, 2 m. N. of Redhill; lime-works; firestone quarries. Pop. (par.) 3,650.

Merthyr Tydfil ('Tydfil the Martyr'), co. bor., Glamorganshire, Wales, on R. Taff; rich in coal and iron; ironworks; brick and tile making. Pop. 71,100.

Merton and **Morden**, urb. dist., Surrey, England, 3½ m. S. of Clapham Junction, London; part of Greater London; remains of priory. Pop. 41,300.

Merv, tn. and oasis, Turkmen Rep., Asia, U.S.S.R.; produces cereals, fruit; live-stock; woollen carpets; in cotton dist. Pop. of oasis, 253,000; of tn., 19,000.

Meshed, tn., Khurasan, N.E. Persia; silks, carpets, rugs, shawls, sword-blades manufactured. Pop. 85,000.

Mesopotamia. See **IRAQ**.

Messina (*mes-sē'nā*). (1) Prov., Sicily, Italy; traversed by mountain chains (highest point, 6,055 ft.); produces corn, flax, fruit, sulphur, copper, oil. Area, 1,254 sq. m.; pop. 645,000. (2) Cap. of above, on Strait of Messina; manufactures silks, muslin, chemicals, coral ornaments; suffers from earthquakes; city devastated in 1908 and over 80,000 lives lost. Pop. 204,000. (3) **STRAIT OF**, separates Sicily from Italy; deep channel, strong current; 'races' in strait are the Scylla and Charybdis of *Odyssey*. Length, 19 m.

Methil, tn., Fife, Scotland, on Firth of Forth; forms burgh with Buckhaven and Innerleven; exports coal.

Methuen, town, Massachusetts, U.S.A., 10 m. N.E. of Lowell, hats, shoes, cottons, woollens manufactured. Pop. 15,000.

Metz, fort. tn., Moselle, France, on R. Moselle; fine Gothic cathedral; leather goods, preserved fruit, poultry, wine, tobacco. Pop. 70,000.

Mendon (*moo-don*'), tn., France, suburb of Paris; glassworks; ammunition, linen, buttons; observatory. Forest a holiday resort of Parisians. Pop. 18,000.

Meurthe-et-Moselle (*moort-ā-mō-zel*'), frontier dep., N.E. France; hilly; drained by R. Moselle and affluents; forests, vines, fruits, sugar-beet, hops,

tobacco. Chief tn. Nancy. Area, 2,036 sq. m.; pop. 552,000.

Meuse. (1) Or MAAS, river, rises in Haute-Marne, France; flows through Belgium and Holland; joins the Waal, left branch of R. Rhine; length, 370 m., 400 navigable. (2) Dep., N.E. France; surface undulating; in w., Forest of Argonne; in e., plateau of Woëvre; drained by R. Meuse; forests; horse breeding; cereals, beet-root, hemp, wine. Chief tn., Barle-Duc. Area, 2,408 sq. m.; pop. 218,000.

Mevagissey, par., vil., Cornwall, England, 5 m. s. of St. Austell; summer resort; fishing. Pop. 1,750.

Merborough, urb. dist., W. Riding, Yorks, England, 11 m. N.E. of Sheffield; ironworks, potteries; glass bottles, grindstones. Pop. 15,900.

Mexico. (1) Rep. in s. of N. America; bounded on n. by U.S.A., e. by Gulf of Mexico and Caribbean Sea, s. by Brit. Honduras and Guatemala, and w. by the Pacific. The Rio Grande forms n. boundary for over 1,100 m. Peninsula of Yucatan lies to e. of Bay of Campeachy; on w. is peninsula of Lower California; coastal strip is bordered by mt. ranges—Sierra Madre (9,000 ft.) on w., and on e. line of heights (16,000 ft.), sometimes called Sierra Madre Oriental. Low ground extends along peninsula of Yucatan. Between Sierra Madre ranges stretches great central plateau, with height varying from 7,000 to 8,000 ft. Many dormant and extinct volcanoes (Orizaba, 18,200 ft.), and in s. a few still in action. Coastal strips and low ground (*Tierra caliente*) are hot and unhealthy, with rainfall ranging up to 130 in. On the plateau (*Tierra fria*) maximum temperature in summer is about 88°, and in winter minimum may fall to 30°; between these is *Tierra templada*, or intermediate zone (3,300–6,500 ft.). Soil is fertile, and where irrigation is good two crops can be grown in one year. In n. great herds of horses, cattle, sheep, and pigs are reared, largely for U.S.A. market. Mahogany and dye-

woods, wheat, maize, rice, beans, sugar, coffee, cotton, and sisal-hemp are obtained. One of richest mineral countries in world, and takes a foremost place in world's production of silver, gold, lead, copper, and zinc; ranks fourth in world's production of petroleum. Country is very unsettled politically, and this has retarded industrial development. Cap. Mexico. Vera Cruz and Tampico, on Gulf of Mexico, are chief ports. Area, 767,198 sq. m.; pop. 14,335,000. (2) Or MEXICO CITY, cap. of above; alt. 7,415 ft.; stands c. 3 m. from shores of Lake Texcoco; railway transit and distributing centre; foundries, and iron working; manufactures include textiles, clothing, tobacco, paper, chemicals; univ. Pop. 906,000. (3) GULF OF, inlet of Atlantic Ocean, s. of N. America, bordered by U.S.A. and Mexico; few islands; low tides; branch of N. Equatorial Current enters from Caribbean Sea, and leaves by Strait of Florida as Gulf Stream. Area, 716,000 sq. m.

Mézières (*mā-zē-ār*), tn., Ardennes, France, on R. Meuse; nails, hardware; type-founding. Pop. 8,000.

Ménstür (*mā'zō-tōor*), tn., Hungary, 80 m. S.E. of Budapest; market for agricultural produce; flour mills and potteries. Pop. 26,000.

Miami (*mī-ām'i*), city, Florida, U.S.A., on Biscayne Bay; favourite winter resort; fruits and vegetables; fishing. Destroyed by tornado (1926). Pop. 111,000.

Michigan (*mish'e-gan*). (1) N. Central State, U.S.A., consists of two detached portions, one a peninsula between L. Superior and N. end of L. Michigan, the other a larger peninsula between L. Michigan on w. and Lakes Huron and Erie on e.; surface of northern peninsula hilly; of the other, hilly in n. and flat in s.; drained by Rs. Muskegon, Grand, Kalamazoo, and Saginaw. Extensive forests, lumbering important. Agriculture also important; cereals, fruits, vegetables; sheep and cattle raised; fresh-water fishing and large shipping trade on

lakes. Minerals include iron, copper, coal, salt, gypsum. Manufactures motor-cars, furniture, flour, leather, paper; slaughtering and meat packing important. Cap. Lansing; largest tns., Detroit, Grand Rapids. Area, 57,980 sq. m.; pop. 4,600,000. (2) **LAKE**, one of Great Lakes of N. America, entirely included in U.S.A., bounded n. and e. by Michigan, s. by Indiana, w. by Illinois, Wisconsin; connects with Lake Huron by Strait of Mackinac. Chief port, Chicago. Fisheries are important. Length, c. 320 m.; breadth, 65 m.; area, 22,400 sq. m.

Michigan City, city, Indiana, U.S.A., on Lake Michigan; railway carriages, furniture, hosiery, knitted goods; trade in lumber. Pop. 27,000.

Micronesia (*mi-kro-nesh'ya*), a number of groups of small islands, w. Pacific Ocean; includes the Caroline, Gilbert, Marianas, Marshall, and Pelew Islands.

Mid Calder. See CALDER.

Mid'delburg, chief tn., Zealand Holland, in centre of Walcheren I., 4 m. by rail N.E. of Flushing; important member of Hanseatic League in Middle Ages; cotton mills; mkt. tn.; holiday resort. Pop. 18,000.

Mid'dlesbrough, co. bor. and port, N. Riding, Yorks, England, on estuary of R. Tees; great iron and steel manufactures, chemical works, salt. Pop. 138,500.

Mid'dlesex, metropolitan co., England, n. of R. Thames; included in Greater London; surface flat or undulating, nowhere above 450 ft.; dairy produce, market gardens, orchards; manufactures explosives, small arms, beer, soap, chemicals. Area, 232 sq. m.; pop. 1,638,500.

Mid'dleton, tn., Lancs, England, on R. Irk, 6 m. N.E. of Manchester; textiles, chemicals, soap, machinery; coal mines. Pop. 29,300.

Mid'dleton-in-Tees'dale, mkt. tn. and par., Durham, England; ironstone, spar, and building stone. Pop. (par.) 2,000.

Mid'dletown. (1) City, Connecticut,

U.S.A., on R. Connecticut; Wesleyan Univ.; trades in rubber, cotton, silk, condensed milk. Pop. 23,000. (2) City, Ohio, U.S.A., on R. Miami, 30 m. N. of Cincinnati; tobacco, agricultural implements, bicycles, gas engines, paper. Pop. 30,000. (3) City, New York, U.S.A., 55 m. N.W. of New York; ironworks, railway workshops. Pop. 20,000.

Mid'dlewich, mkt. tn., Cheshire, England, 7 m. N. of Crewe; salt works, chemicals, condensed milk. Pop. 5,500.

Mid'hurst, mkt. tn., W. Sussex, England; favourite resort; sanatorium. Pop. (dist.) 15,000.

Mid'land, tn., Ontario, Canada, on S.E. branch of Georgian Bay, 80 m. N.N.W. of Toronto; lake port. Pop. 7,800.

Midleton, mkt. tn., Cork, I.F.S., 12 m. E. of Cork; whisky distilleries. Pop. 2,700.

Midlothian, co., Scotland, bordering s. shore of Firth of Forth; towards s. rise Moorfoot (2,136 ft.) and Pentland Hills (1,898 ft.); chief streams, R. Esk and Water of Leith. Extensive coalfields in E., rich oil-shale beds in W., plentiful building stone, excellent limestone; other industries, paper making, brewing and distilling, flour milling, fisheries, shipping, carpets, tweeds, gunpowder, potteries, rubber goods, rope making. Important agricultural co.; soil is fertile; much good pasture land. Cap. Edinburgh. Area, 366 sq. m.; pop. 526,300.

Midnapore. (1) Dist., Bengal, India; mainly well-watered plain; rice, indigo. Area, 5,055 sq. m.; pop. 2,667,000. (2) Cap. of above, 68 m. W. of Calcutta; copper and brass manufactures, silk. Pop. 29,000.

Mid'somer Norton, urb. dist., Somersetshire, England, 10 m. S.W. of Bath; coal mining; textiles and leather goods. Pop. 7,500.

Mieres (*myd'ras*), tn., N. Spain, 9 m. S.E. of Oviedo; coal, iron, copper, and cinnabar mines; steel, chemicals. Pop. 41,000.

Mil'an. (1) Prov., Lombardy, N.

Italy; mostly fertile plain highly canalized; corn, rice, flax, silk, wine, dairy produce. Area, 1,078 sq. m.; pop. 1,892,000. (2) Cap. of above, on R. Olona, in fertile plain; important industrial, commercial, and railway centre, and chief financial city of Italy; partly enclosed by walls and entered by several gates. Magnificent Gothic cathedral of white marble (founded 1386; completed 1805-13); San Lorenzo, the oldest church; La Scala (famous opera-house). Centre of silk industry and of Italian book trade; velvets, woollens, cotton goods, ironware, carriages, motor-cars, electric cables, furniture, jewellery, glass, paper, porcelain, chemicals. Pop. 962,000.

Milazzo (*mē-laf'so*), port, Messina, Sicily; wine, fruit, olive oil, sulphur. Pop. 16,000.

Mil'denhall, mkt. tn., Suffolk, England, on R. Lark, 12 m. s.w. of Bury St. Edmunds; relics of Stone Age; flour milling. Pop. (dist.) 7,800.

Mil'dura, tn., N. Victoria, Australia; an irrigation settlement adjoining Wentworth in New South Wales; fruit-growing centre. Pop. 6,000.

Milford. (1) Or **MILFORD HAVEN**, port, Pembrokeshire, Wales, on Milford Haven; excellent harbour; oyster beds, fish trade. Pop. 10,100. (2) Eccles. dist. and vil., Surrey, England, 1½ m. s.s.w. of Godalming; nurseries. Pop. (dist.) 2,250.

Mil'ford-on-Sea, par. and vil., Hants, England, 3½ m. s.w. of Lymington; summer resort. Pop. (par.) 2,000.

Mil'brook, par. and vil., Cornwall, England, on inlet of R. Tamar; fishing. Pop. (par.) 2,000.

Mil Hill, eccles. dist., Middlesex, England, in Hendon urban dist.; Botanical Garden; public school; residential dist. Pop. 9,100.

Mil'om, tn., Cumberland, England, 48 m. s.s.w. of Carlisle; has iron mines and works. Pop. 7,400.

Mil'port, tn., Great Cumbrae Island, Buteshire, Scotland, on Millport Bay; wat.-pl.; white freestone quarries, marine biological station. Pop. 2,100.

Mill'ville, city, New Jersey, U.S.A., on R. Maurice, 38 m. s.s.e. of Philadelphia; glass and textiles; sand mining. Pop. 15,000.

Mil'nathort, mkt. tn., Kinross-shire, Scotland, near Loch Leven; livestock market; wool and linen industries. Pop. 1,200.

Milngavie (*mīl-gā'*), tn., Dumbarton-shire, Scotland, 6 m. n. of Glasgow; bleaching, calico printing, dyeing. Pop. 5,100.

Milo (*mē'lō*), anc. MELOS, one of Cyclades Islands, Aegean Sea; volcanic in origin; earthquakes frequent; mountainous in s.w.; flat and fertile in n.e.; fruits, vines, cotton, barley cultivated; exports gypsum, sulphur, china clay. Famous statue of Venus found here. Area, c. 52 sq. m.; pop. 5,000.

Mil'ton Re'gis, par. and tn., Kent, England, adjoining Sittingbourne; brickworks. Pop. (par.) 7,100.

Milwau'kee, tn., Wisconsin, U.S.A., on w. shore of Lake Michigan; great centre of railways and lake shipping; exports oats and other cereals, flour; manufactures machinery, brass and iron ware, agricultural implements; flour mills, meat-packing and sausage establishments, railway works; univ. Pop. 573,000.

Minas Geraes (*mē'nās zhā-rā'es*), ('mines everywhere'), state, E. Brazil, S. America; surface consists of plateau in w., elsewhere mountainous with fertile valleys; watered by R. São Francisco, Grande Parana. State has valuable mineral deposits, including gold, diamonds, iron, manganese, lead. Coffee, tobacco, cotton, rice, vines, and sugar-cane are cultivated, and cattle raised. Cap. Belo Horizonte. Area, 221,894 sq. m.; pop. 7,258,000.

Minbu'. (1) Div., Upper Burma; plain, rising to hilly country in w.; well watered. Area, 17,172 sq. m.; pop. 1,076,300. (2) Dist. of above; rice, cotton, valuable timber. Area, 3,299 sq. m.; pop. 274,000. (3) Cap. of above, on R. Irrawaddy; centre of river traffic and fishing. Pop. 5,400.

Minch, strait of Atlantic Ocean, separating N.W. mainland of Scotland from N. part of Outer Hebrides, s. portion continued as Little Minch, between Skye and Outer Hebrides.

Minchinhampton, tn., Gloucestershire, England, $3\frac{1}{2}$ m. S.E. of Stroud; woollens, brewing. Pop. 3,700.

Mindanao, second largest island of Philippines; surface mountainous, with many volcanoes; drained by the Rio Grande; numerous lakes; densely forested; copper, coal, platinum; cattle and horse raising; rice, coffee, hemp, sugar-cane, tobacco. Area, 36,906 sq. m.; pop. c. 560,000.

Minden, tn., Westphalia, Prussia, on R. Weser; famous cathedral; chemicals, glass, tobacco, soap. Pop. 27,000.

Minehead (*min'head*), mkt. tn. and wat.-pl., Somersetshire, England, on S. shore of Bristol Channel; beach shows at low tide remains of submerged forest; leather. Pop. 6,300.

Minho (*mên'yô*), riv., N.W. Spain; flows W. from Cantabrian Mts. to Atlantic Ocean; estuary divides Spain from Portugal; navigable for 25 m. Length, 175 m.

Minneapolis, city, Minnesota, U.S.A., on R. Mississippi, immediately above 'twin city' of St. Paul; on Falls of St. Anthony, water-power of which has enabled town to become centre of immense trade in flour and lumber; has great number of flour mills; manufactures of machinery, motors, iron goods, furniture, linseed oil; univ. Pop. 465,000.

Minnesota, North Central State, U.S.A.; bounded on N. by Manitoba, Ontario; E. by Lake Superior, Wisconsin; S. by Iowa; W. by S. and N. Dakota; surface flat or undulating; drained by R. Mississippi, Minnesota, Red R.; many large lakes, including Mille Lacs, Red Lake, Lake Winnibigoshish. Agriculture is chief industry; large quantities of maize, wheat, and other cereals; great pine forests in N.; maple, oak, ash farther S.; lumbering important; large quantities of iron produced; manu-

factures flour, leather, boots, clothing, farm machinery. Cap. St. Paul; large tns., Minneapolis, Duluth. Area, 84,682 sq. m.; pop. 2,387,000.

Minorca, one of Balearic Islands, Spain, in Mediterranean Sea; hilly; cattle and horses; cereals, oil, wine, fruits, flax. Area, 293 sq. m.; pop. 42,000.

Minsk, cap. of White Russia, U.S.S.R., on R. Svisloch; machinery and leather manufactures, flour mills; pigs' bristles. Pop. 132,000.

Minster-in-Sheppey, par. and vil., Kent, England; rising seaside wat.-pl.; oyster beds. Pop. (par.) 3,000.

Minster-in-Thames, par. and vil., Kent, England; fruit growing. Pop. (par.) 3,000.

Minusinsk, tn., Siberian Area, U.S.S.R., on R. Yenisei; coal and copper mines; sawmills and sugar factory. Pop. 20,000.

Miquelon (*mék'lon*), GREAT and LITTLE, isl. off S.W. coast of Newfoundland, consisting of two portions connected by a sandy isthmus; with St. Pierre forms sole colony of France in N. America; cod fishing. Area, 83 sq. m.; pop. 4,000.

Miramichi (*mir-a-mish-ê*), riv., New Brunswick, Canada; flows into Miramichi Bay, Gulf of St. Lawrence; salmon and trout fishing. Length, 230 m.

Mirfield, urb. dist., W. Riding, Yorks, England, 5 m. N.E. of Huddersfield, on R. Calder; cotton and woollengoods, carpets, blankets; collieries. Pop. 12,100.

Mirzapur. (1) Dist., United Provinces, India; crossed by mountain ranges; much forest. Area, 4,368 sq. m.; pop. 724,000. (2) Tn. in above, on R. Ganges, between Allahabad and Benares; carpets, brassware. Pop. 55,000.

Mishawaka, tn., Indiana, U.S.A., 90 m. S.E. of Chicago; manufactures machinery, rubber and woollen goods, shoes. Pop. 29,000.

Misiones, terr., N.E. Argentina, between rvs. Paraná and Uruguay, S. America; surface uneven and forest-

covered; chief productions, Paraguay tea, tobacco, oranges. Cap. Posadas. Area, 11,511 sq. m.; pop. 54,000.

Miskolcz (*mish'kolts*), tn., Hungary, 85 m. N.E. of Budapest; flour, leather, boots, porcelain. Pop. 59,000.

Mississippi ('great river'). (1) Important river of N. America; second largest in world; rises in Lake Itasca, in Minnesota, some 1,560 ft. above sea-level, and flows southward to Gulf of Mexico. Drainage basin, nearly 1,257,000 sq. m., is over 40 per cent. of whole area of U.S.A. The Missouri, a w. affluent, is a much larger stream than the Mississippi itself when they unite at St. Louis; other w. affluents are Minnesota, Des Moines, Francis, White, Arkansas, and Red Rivers. E. tribs. are Wisconsin, Illinois, Ohio (with affluents Cumberland and Tennessee), Yazoo. On other side of the river are rich alluvial 'bottoms' of large extent, at many points below level of stream, which is prevented from overflowing by strong embankments known as levees; at mouth is large delta with many passages; river valley suffers from frequent floods; river navigable to Minneapolis; great river traffic carried on by specially constructed steamers. Length, over 4,000 m. (2) South Central State, U.S.A., bounded N. by Tennessee, E. by Alabama, S. by Mississippi Sound, Louisiana, W. by Gulf of Mexico and Louisiana; surface flat along coast, rising to low hills drained by R. Mississippi and tribs. and other streams. Soil fertile; chief industry agriculture; great quantities of cotton, also rice, maize, wheat, oats, potatoes; cattle, horses, sheep, and pigs raised. Largely forested; lumbering important. The manufactures include cottons, cotton-seed oil, turpentine, railway cars. Cap. Jackson. Area, 46,865 sq. m.; pop. 1,791,000.

Missolonghi, fort. tn., Greece, on Gulf of Patras; Byron died here (1824); currants, valonia. Pop. 9,000.

Missoula (*mis-oo'la*), city, W. Montana, U.S.A., on R. Clark; univ.;

agricultural and fruit-growing region; railway workshops; oil refining. Pop. 13,000.

Missouri (*mis-oor'i*). (1) River, U.S.A.; chief trib. of R. Mississippi; rises in Rockies; formed by union of 'Three Forks'—Jefferson, Galatin, Madison; receives Dakota from N., Yellowstone, Little Missouri, Cheyenne, White, Platte, Kansas, Osage from S.; navigation difficult; joins Mississippi near St. Louis. Length, over 2,500 m. (2) E. Central State, U.S.A., bounded N. by Iowa, E. by Illinois, Kentucky, Tennessee, S. by Arkansas, W. by Oklahoma, Kansas, Nebraska; surface flat or undulating in N., with wide stretches of prairie in N.W.; to S. of Missouri R. the Ozark Mts. reach height of c. 3,000 ft. Rivers are Mississippi, Missouri, and tribs. Principal industry agriculture; heavy crops of maize, wheat, oats, hemp, flax, cotton, tobacco, fruit; cattle, pigs, and sheep reared; minerals include coal, zinc, lead, cement, copper. Important industries are slaughtering and meat packing, flour milling, motor building, boot making, printing, and ironfounding. Cap. Jefferson. Area, 69,420 sq. m.; pop. 3,404,000.

Misurina, tn., Tripolitania, Italian Libya, on Mediterranean Sea; reed mats and carpets. Pop. 14,000.

Mitan. See JELGAVA.

Mitcham, urb. dist., Surrey, England, 7½ m. S. of London; centre of growing of medicinal herbs (lavender, liquorice, etc.). Pop. 56,900.

Mitchell, tn., S. Dakota, U.S.A., on James or Dakota R.; agricultural centre; Wesleyan univ. Pop. 10,000.

Mitchellstown, mkt. tn., N. CO. Cork, I.F.S.; near by are limestone caverns with fine stalactites. Pop. 2,100.

Mitrovica (*mit-ro-vit'sa*), tn., Yugoslavia, on R. Sava, 43 m. W.N.W. of Belgrade; pig and sheep market; river trade. Pop. 12,000.

Mittweida (*mit'vi-da*), tn., Saxony, Germany, 12 m. N.E. of Chemnitz; textiles, cigars, agricultural implements. Pop. 19,000.

Mladá Boleslav, formerly Jung-

BUNZLAU, tn., N. Bohemia, Czechoslovakia, on R. Jizera; rly. jn.; sugar, soap, candles. Pop. 17,000.

Mława (*mud'vā*), tn., Poland, 60 m. N.W. of Warsaw; flour mills, vinegar, soap, oil manufactures; tanneries, brick works, and agricultural machine works. Pop. 14,000.

Mo'berly, city, Missouri, U.S.A., 135 m. N.W. of St. Louis; foundries, railway repair shops; hosiery, shoes, cheese. Pop. 21,000.

Mohila (*mo-bēl'*), seapt., Alabama, U.S.A., on Gulf of Mexico; exports cotton, lumber, timber, meat, and iron and steel products, vegetables; shipbuilding. Pop. 68,000.

Mocha (*mō'kā*), port, Yemen, Arabia, on Red Sea; decaying since its former coffee trade was shipped through Hodeida. Pop. 5,000.

Mod'ar, riv., Orange Free State, S. Africa, trib. of R. Vaal; length, 175 m.

Modena (*mō'dā-nā*), tn., Italy, 25 m. W.N.W. of Bologna; has 12th cent. Romanesque cathedral; univ.; observatory; manufactures leather, silk, metal ware, vinegar. Pop. 91,000.

Modes'to, tn., California, U.S.A., 85 m. S.E. of San Francisco; centre of irrigated tract; fruit and vegetables; fruit canning, creamery. Pop. 10,000.

Modica (*mō'dē-cā*), tn., Syracuse, Sicily; grain, oil, wine. Pop. 56,000.

Mōd'ling, tn., Austria, 10 m. S.W. of Vienna; summer resort, with iron and sulphur springs; iron foundries; shoes. Pop. 19,000.

Moff'at, wat.-pl., Dumfriesshire, Scotland, on R. Annan; mineral springs; holiday resort. Pop. 2,000.

Mogador', port, Morocco, Africa, on Atlantic coast; exports wheat, barley, eggs, wool, gum-arabic. Pop. 18,000.

Mogilev (*mō-hē'yōf*). (1) ON-DNIESTER, tn., White Russia, U.S.S.R.; tanning; tobacco, flour, beer. Pop. 47,000. (2) ON-DNIESTER, tn., Ukraine, U.S.S.R.; distilling, brewing, sugar refining. Pop. 22,000.

Mohács (*mō'hatch*), tn., Hungary, on R. Danube, on frontier of Yugoslavia; river port; milling and brewing. Pop. 16,000.

Moham'merah, tn., port, Persia, on the Shatt-al-Arab; exports dates. Pop. 10,000.

Mōji (*mō'jē*), port, Kyushu, Japan, on Shimonoseki Strait; exports coal, cotton thread, sugar, timber, cement. Pop. 95,000.

Mō'la di Bar'i, port, Apulia, s. Italy, on Adriatic Sea; exports grain, wine, olives, live-stock. Pop. 15,000.

Mold, co. tn., Flintshire, Wales, on R. Alyn; mkt. tn., collieries, lead-smelting works. Pop. 5,100.

Moldau. See **VLTAVA**.

Moldavia. (1) N. prov., Romania; forested in N.W.; red wine; hogs. Area, 14,668 sq. m.; pop. 2,145,400. (2) Autonomous republic, Ukraine, U.S.S.R., 1 bk. of R. Dniester; upland plain with numerous streams; maize, wheat, rye, sunflower seed, tobacco, fruits. Cap. Birzulav. Area, 3,315 sq. m.; pop. 572,000.

Molesey, EAST AND WEST, urb. dist., Surrey, England, on R. Thames. E. Molesey stands at confluence of R. Mole and Thames, opposite Hampton Court. Residential dist.; part of Greater London. Pop. 8,500.

Molfet'ta, port, Bari, s. Italy, on Adriatic Sea; exports wine, almonds, olive oil. Pop. 46,000.

Moline (*mō-lēn'*), city, N. Illinois, U.S.A., on R. Mississippi; flour and saw mills, iron foundries; agricultural machinery. Pop. 32,000.

Molokai (*mō-lo-kī'*). See under **HAWAIIAN ISLANDS**.

Moluccas (*mō-luk'as*), or **SPICE ISLANDS**, archipelago, Dutch East Indies; volcanic; spices, copra, rice, sago, timber, pearls. Cap. Amboina. Area, 190,860 sq. m.; pop. 623,000.

Momb'asa, chief port, Kenya Colony, E. Africa; terminus of Uganda rly.; chief harbour, Kilindini; exports ivory, copra, gum, grain, rubber, and hides. Pop. c. 42,000.

Mon'aco, small independent state, Europe, on French Mediterranean coast; ruled by hereditary prince under French protection; mild climate; picturesque scenery; favourite tourist resort; olive oil, oranges,

citrons, perfumes, liqueurs. Tns. are Monaco, Condamine, and Monte Carlo. Area, 8 sq. m.; pop. 25,000.

Monadhliath Mts. (*mò-nà-lì'a*), part of Grampian highlands, *z.* Invernesshire, Scotland; between the upper Findhorn and Spey rvs.; highest peak, Carn Maig, 3,087 ft.

Mon'aghan. (1) Co., Ulster, I.F.S.; surface hilly; crossed by Slievebeagh Mts.; bogs and lakes frequent; turnips, potatoes, and oats grown; trade in linen and agricultural produce. Area, 498 sq. m.; pop. 65,000. (2) Cap. of above; agricultural produce; cathedral. Pop. 4,600.

Monastir (*mo-nàs-tér*). See BRIT. J. **Mon'oton.** tn., New Brunswick, Canada, on R. Petitcodiac; *z.* centre of Canadian National Rlys.; rly. workshops; textiles. Pop. 17,000.

Mondovì (*mon-dò-vè*), tn., Piedmont, Italy, 50 m. s. of Turin; porcelain, paper, silk. Pop. 20,000.

Mones'sen. town, Pennsylvania, U.S.A., 40 m. s. of Pittsburgh; steel, wire, tinplate. Pop. 18,000.

Monfalcone, fort. tn., Trieste, Italy; sea-bathing; mineral waters; ship-building; oil refining; chemicals. Pop. 10,000.

Monforte de Lemos, tn., Galicia, Spain, 75 m. s.e. of Corunna; linen, soap. Pop. 14,000.

Monghyr (*mon-gér*). (1) Dist., Bengal, India; flat in *n.*, undulating in *s.*; many marshes; drained by R. Ganges; mainly agricultural. Area, 3,927 sq. m.; pop. 2,069,000. (2) Cap. of above; on R. Ganges, 80 m. below Patna; manufactures cigarettes. Pop. 47,000.

Mongolia, vast region, Central Asia; bounded *n.* by Siberia, *z.* by Manchuria, *s.e.* and *s.w.* by China proper, *n.w.* by Kazak, U.S.S.R.: three physical divisions: (1) Central Mongolia, composed of stony and sandy desert passing into steppes, commonly called Gobi; (2) N.W. Mongolia, which includes various mountain ranges, including Tannu, Khangai, and Great Altai Mts.; (3) S.E. or Inner Mongolia, including the Great

Khingan and Inshan chains. Principal rvs. are Black Irtysh, Yenisei, Selenga, Orkhon, Kerulen, all in northern half; Hwang-ho drains a corner of *s.* Climate extreme. Livestock raised; minerals include gold, copper, silver, iron, tin. Divided into two political regions, Inner Mongolia (chief tn. Kalgan), a broad belt lying adjacent to, and really constituting a part of, China; and Outer Mongolia (chief tn. Urga), an independent republic, still nominally Chinese, though with leanings towards becoming a member of the U.S.S.R. Area, *c.* 1,875,000 sq. m.; pop. *c.* 750,000.

Monifieth, par. and burgh, Angus, Scotland, on Firth of Tay; jute and machinery. Pop. (burgh) 3,000.

Monk Bretton, urb. dist., Yorks, England, $1\frac{1}{2}$ m. n.e. of Barnsley; collieries. Pop. 5,100.

Monkland, New and Old, adjoining pars., Lanarkshire, Scotland, containing tns. of Airdrie and Coatbridge; both rich in iron and coal. Pop., New Monkland, 38,500; Old Monkland, 62,900.

Monks'town, par. and vil., co. Cork, I.F.S., on Cork Harbour; sea-bathing. Pop. (par.) 2,000.

Mon'mouth, co. tn., Monmouthshire, England, at junction of Rs. Monnow and Wye; smelting and tinplate works, sawmills. Pop. 4,700.

Monmouthshire, mar. co., England, on Welsh border, and for certain purposes treated as part of Wales; surface flat along coast, elsewhere hilly; drained by Rs. Usk, Wye, and other streams; coal and iron found about Newport, Tredegar, and Ebbw Vale; grazing, wheat, orchards; important river fisheries. Co. tn., Monmouth. Area, 546 sq. m.; pop. 434,800.

Monopoli, port, Apulia, *s.* Italy, on Adriatic Sea; exports oil, fruit, flour, soap, wine. Pop. 23,000.

Monreale (*mon-rà-d'la*), tn., Palermo, Sicily; oranges, olives, almonds. Pop. 24,000.

Monroe, city, *n.* Louisiana, U.S.A., on R. Ouacheta; manufactures of paper, printers' ink, lumber products,

bricks; centre of extensive natural gas field. Pop. 26,000.

Monro'via, port and cap. of Liberia, W. Africa, at mouth of St. Paul R.; exports dye-woods, rubber, palm oil and kernels. Pop. (including Kru-town), 10,000.

Mons, cap., Hainaut, Belgium, 35 m. s.s.w. of Brussels; centre of chief coal-mining dist. of Belgium; railway, road, and canal junction; cathedral. Industries include engineering, cotton spinning, iron founding, and glass making. Famous Brit. retreat from Mons (1914). Pop. 28,000.

Montana, n.w. state, U.S.A., bounded n. by Canada, e. by N. and S. Dakota, s. by Wyoming, w. by Idaho; surface generally consists of undulating prairie, rising w. to Rocky Mts., drained by R. Columbia and tribs. in w. Missouri and affluents, most important of which are Milk and Yellowstone, in e. Agriculture is rendered possible by irrigation; livestock raised; cereals grown, fruit widely cultivated; important deposits of copper; also coal, gold, silver, lead, petroleum. Slopes of Rockies yield timber. Chief industries, flourmilling, lumbering, copper smelting. Cap. Helena. Area, 147,182 sq. m.; pop. 540,000.

Montargis (*mon-târ-shê*), tn., Loiret, France, 40 m. E. of Orleans; chemicals, rubber, tar, hosiery. Pop. 12,000.

Montauban (*môn-tô-bon*), chief tn., Tarn-et-Garonne, France, on R. Tarn; trades in wine, oil, fruit, agricultural produce; horse fair; textiles, furniture, straw hats. Pop. 18,000.

Montbéliard (*mon-bâ-le-ar*), town, Doubs, France, 10 m. s. of Belfort; clocks, watches, files, knitting looms, textiles; trades in wine, cheese, cattle. Pop. 10,000.

Mont Blanc. See BLANC, MONT.

Montrison (*mon-brê-sôn*), tn., Loire, France, 21 m. n.w. of St. Etienne; liqueurs, ribbons, flour. Pop. 7,000.

Montceau-les-Mines (*môn-sô-lâ-mên*), tn., Saône-et-Loire, France, 10 m. s. of Le Creusot; centre of

Blanzy coalfield; textiles; foundries. Pop. 8,000.

Mont Cenis. See CENIS, MONT.

Montclair, tn., New Jersey, U.S.A., 15 m. from New York; summer resort; paper goods. Pop. 42,000.

Mont-de-Marsan (*môn-de-mar-sôn*), chief tn., Landes, s.w. France; resin, oil, straw envelopes for bottles. Pop. 9,000.

Mon'te Car'lo, tn., principality of Monaco, overlooking the Mediterranean Sea; has exquisite climate and beautiful gardens. Noted for its casino. Pop. 11,000.

Montefrio (*mon-tâ-frê'o*), tn., s. Spain, 25 m. n.w. of Granada; remains of Moorish castle; manufactures alcohol and soap. Pop. 11,000.

Montélimar (*mon-tâ-lê-mar*), tn., Drôme, France, near R. Rhône; brick and tile works, tanneries, sawmills; coal and lignite; famed for 'nougat'. Pop. 8,000.

Montenegro (*mon-tâ-nê'gro*), ('Black Mountain'), state, Yugoslavia, almost entirely cut off from Adriatic by Dalmatia. Surface is mountainous, rising to barren stony plateau, 5,000 ft. above sea-level; narrow coastal strip (28 m.) with valleys opening off it; drained by Rs. Boyana, Zeta, and Moratcha; in s. is Lake Scutari (134 sq. m.). Climate varies with elevation—warm on coast, cold in mountainous districts; roads are snow-blocked in winter. In e. are extensive forests of beech, oak, pine, undeveloped owing to lack of roads; principal crops, tobacco, maize, apples, grapes, olives, figs, mulberries; sheep, goats, cattle, swine, and horses are raised. Cap. Cetinje. Area, 3,738 sq. m.; pop. 200,000.

Montereau (*mon-te-rô*), tn., Seine-et-Marne, France, at junction of Rs. Yonne and Seine; porcelain, bricks, boots, shoes, agricultural implements. Pop. 9,000.

Monterey (*mon-te-râ*). (1) Tn., California, U.S.A., on Monterey Bay; fishing; sardine canneries. Pop. 4,000. (2) Or MONTERREY, cap. of Nuevo León, Mexico, 190 m. w. of

mouth of Rio Grande; smelting works, iron foundries, cotton factories; silver, lead, zinc, copper mining. Pop. 88,000.

Mon'te Ro'sa, peak, Pennine Alps, on frontier between Switzerland and Italy; snow-clad; glaciers; observatory at 15,000 ft.; has four summits. The highest point, Dufour- or Höchst-Spitze (15,217 ft.), is in Swiss terr.

Monte Sant' Angelo (*mon-tā sānt ān'je-lo*), tn., Apulia, s. Italy, 27 m. n.w. of Foggia; castle; pilgrim resort. Pop. 22,000.

Montevideo, cap. and chief port, Uruguay, S. America, on n. shore of Rio de la Plata; univ.; coaling station; exports live-stock, beef, wool, skins, grease, horns, cereals; beef salting an important industry. Pop. 459,000.

Montgomery. (1) Co. tn., Montgomeryshire, Wales; cattle market. Pop. 900. (2) Cap. of Alabama, U.S.A., on R. Alabama; important commercial centre; trade in cotton, timber; railway workshops; manufactures fertilizers. Pop. 66,000.

Montgomeryshire, inland co., Wales; surface mountainous with fertile valleys; well wooded; chief riv., Severn, with tribs., Vyrnwy, Tanat, Dovey; sheep pasturing; lead and blende mined; slate and limestone quarries; flannel manufactures. Co. tn., Montgomery. Area, 797 sq. m.; pop. 48,500.

Montilla (*mon-tēl'yā*), city, s. Spain, 23 m. s. of Córdoba; manufactures coarse linen and pottery. A montilado wine. Pop. 15,000.

Montluçon (*mōn-loo-sōn'*), tn., Allier, central France, on R. Cher; agricultural centre; trade in grain; iron-works, engineering shops; chemicals; sewing machines; mirrors. Pop. 35,000.

Montmorency (*mōn-mo-rōn-sē*), tn., near R. Seine, 10 m. n. of Paris; bleaching, dyeing; bricks, tiles. Pop. 10,000.

Montoro, city, Córdoba, s. Spain, on R. Guadalquivir; olive oil produc-

tion; medicinal springs; agricultural products and wood. Pop. 18,000.

Montpellier (*mōn-pel-yā*), cap. Hérault, France, near Gulf of Lions; wine, brandy, fruit, silk culture, agriculture; manufactures soap, candles, and chemicals; famous univ.; has oldest botanic garden in Europe. Pop. 83,000.

Montreal (*mōn-re-ō'*), tn., Quebec, Canada; situated on n. of Montreal island, at junction of Rs. Ottawa and St. Lawrence; majority of population French; has many old French buildings; seat of McGill Univ.; great Victoria Railway Bridge across R. St. Lawrence; head of ocean navigation on R. St. Lawrence; chief port and largest tn. in Canada; harbour ice-free from May to November; 7 m. of wharfage; extensive canal communication with principal towns of Great Lakes; headquarters of railways; railway works; manufactures almost every article of commerce. Pop. 1,098,000.

Montreuil-sous-Bois (*mōn-troo-yē-sōo-buā*), tn., France; e. suburb of Paris; famous for peaches; manufactures oils, chemicals, glass. Pop. 59,000.

Montreux (*mōn-troo'*), tn., Vaud, Switzerland, on n.e. shore of L. Geneva; holiday resort. Pop. 19,000.

Montrose, royal burgh and port, Angus, Scotland; flax spinning, timber trade, fishing, jam making, brewing; popular resort. Pop. 10,200.

Mont St. Michel (*mōn san mé-shēl'*), granite islet off coast of Normandy, France, in Bay of St. Michel; rises 240 ft. above surrounding sands, and is reached by causeway; surrounded by 15th cent. walls; old town and Benedictine monastery, now restored as historical monument. Pop. 200.

Montserrat, one of Leeward Islands, Brit. W. Indies; volcanic origin; highest summit, 3,000 ft.; limes, sugar, cotton, onions. Cap. Plymouth. Area, 32 sq. m.; pop. 12,000.

Monza, tn., Lombardy, Italy, 10 m. n. of Milan; manufactures coarse cottons, leather, silk; dyeworks; cathe-

dral contains famous iron crown of Lombardy. Pop. 43,000.

Moose Jaw, city, Saskatchewan, Canada, 40 m. w. of Regina; flour mills; farming machinery; general agricultural trade; rly. jn., Canadian Pacific and Canadian National Rlys. Pop. 20,000.

Moquegua (*mo-ká'gwa*), prov., s. Peru, S. America; mainly mountainous, with barren coastal strip; valleys produce cotton, maize, fruits, vegetables. Cap. Moquegua. Area, 5,549 sq. m.; pop. 43,000.

Moradabad'. (1) Dist., United Provinces, India; soil alluvial; climate healthy; wheat, rice, sugar-cane grown; sugar refining. Area, 2,285 sq. m.; pop. 1,200,000. (2) Cap. of above, 80 m. E. of Delhi; cotton weaving, calico printing; ornamental brassware. Pop. 83,000.

Morar, dist., s.w. Inverness-shire, between L. Nevis, Sound of Sleat, and Sound of Arisaig; holiday resort. L. Morar deepest loch in Scotland. Chief tn. of dist., Mallaig.

Moratal'a, tn., s.e. Spain, 40 m. n.w. of Murcia; cloth, soap, alcohol; excellent wine. Pop. 13,000.

Morava. (1) Riv., Serbia, flows N. into R. Danube, 30 m. e.s.e. of Belgrade; main stream is formed by confluence of the S. Morava (formerly Bulgarian), and W. Morava. Length, 250 m. The Morava valley forms part of the great line of communication from w. Europe to Constantinople and Salonika. (2) Or MARCH, l. bk. trib. of R. Danube, Moravia, Czechoslovakia; flows from Sudetes Mts.; lower course forms boundary between Austria and Czechoslovakia; enters R. Danube near Bratislava. Length, 210 m., of which 50 m. is navigable.

Moravia, prov., Czechoslovakia; surface generally mountainous, intersected by spurs of Sudetes and Carpathian Mts. drained by R. Morava and tribs.; extensive forests; produces cereals, beet sugar, hops, beer, cigars; chief minerals are coal, iron, graphite; manufactures textiles. Cap. Brno. Area, 8,616 sq. m.; pop. 2,663,000.

(3,601)

Moravian Gate, natural depression between Sudetes Mts. and Carpathian Mts., Czechoslovakia, Europe; links upper valley of Morava trib. of R. Danube with that of R. Oder; important rly. route.

Moravska Ostrava, formerly Ostrau, tn., Moravia, Czechoslovakia, on R. Ostravice; in Silesian coalfield; collieries and ironworks; chemicals, soap, oil, bricks. Pop. 114,000.

Moray, formerly ELGINSHIRE, co. on s. shore of Moray Firth, Scotland; drained by Rs. Spey, Lossie, and Findhorn. Mountainous and generally well wooded towards the s.; coastal strip known as 'Laigh o' Moray' is one of most fertile parts of Scotland, producing barley, oats, potatoes, and turnips. Cattle-rearing important. Fishing and distilling are also of great importance. Culbin Sands now cover the former 'Granary of Moray.' Chief tn., Elgin. Area, 477 sq. m.; pop. 40,800.

Moray Firth, part of North Sea, n.e. Scotland; consists of wide outlet of Cromarty and Beaulieu Firths as far as line joining Tarbat Ness and Lossiemouth; sometimes regarded as area of water w. of line joining Duncansby Head and Kinnairds Point; rich fisheries centred on Banff, Buckie, Findhorn, Cromarty, Helmsdale, and Lybster.

Morbihan (*mor-bé-on'*), maritime dep., Brittany, France; includes Belle Isle; coast much indented; extensive heaths, many stagnant pools; wheat, rye, mangels, potatoes, flax, hemp; cattle-breeding, bee-keeping; important fisheries, especially of sardines; oyster culture. Cap. Vannes. Area, 2,738 sq. m.; pop. 543,000.

Morea. See GREECE.

Morecambe and Heysham (*môr'-ham*), munic. bor., Lancs, England, on Morecambe Bay; wat.-pl. Pop. 24,600.

Morelia (*mo-rá'le-a*), city, Mexico, 125 m. w. of Mexico; cotton, linen, and woollen factories; sugar, sweetmeats; cathedral. Pop. 31,000.

Morgantown, tn., in N. of W. Vir-

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ginia, U.S.A.; univ.; coal mining; manufactures glass. Pop. 12,000.

Morlaix (*mor-lä'*), tn., port, Finistère, France, 35 m. E.N.E. of Brest; manufactures paper, tobacco, beer, casks, candles; exports agricultural produce; anc. town, with old wooden houses. Pop. 11,000.

Morley, munic. bor., W. Riding, Yorks, England, 4 m. S.S.W. of Leeds; woollen goods and machinery manufactured; coal mines. Pop. 23,400.

Morocco. (1) French protectorate and Spanish zone (*er Rif*), N.W. Africa, bordering on Atlantic Ocean and Mediterranean Sea, and separated from Europe by Strait of Gibraltar (9 m.). Country traversed by Atlas Mts., which reach an extreme height of 15,000 ft.; surface hilly almost everywhere, but especially so in N. Climate N.W. of Atlas healthy and pleasant; to S. of Atlas there is little rain and sometimes long-continued drought. Between Atlas Mts. and Mediterranean Sea, and extending westward to Atlantic Ocean, is the fertile Tell region, covering one-third of whole area, and producing heavy crops of wheat, barley, linseed, beans, hemp, olives, dates, and Mediterranean fruits. Pasture land covers about one-eighth of whole area, where numbers of cattle, sheep, goats, horses, and mules are raised. Minerals include lead, manganese, phosphates. Important coast fisheries. Sericulture is being developed. Chief exports are cereals, eggs, wool, fruit, olive oil, esparto, hides. There are no railways except the military narrow-gauge lines. Roads are being improved by the French.

Morocco has four capitals—Fez, Marrakesh, Meknes, and Rabat. Coast tns. open to foreign trade are Casablanca, Larash, Mazagan, Mogador, Rabat, Saffi, Tangier, Tetuan. Area, 218,525 sq. m.; pop. (est.) 5,300,000. (2) See MARRAKESH.

Moron de la Fronte'ra, tn., S. Spain, 35 m. S.E. of Seville; marble and chalk. Pop. 19,000.

Mor'peth, mkt. tn., munic. bor.,

Northumberland, England, on R. Wansbeck; metal founding, brewing, brick making, woollen manufactures; agricultural machinery; coal mines in vicinity. Pop. 7,400.

Morristown, tn., New Jersey, U.S.A., 22 m. W. of Newark; fruit growing; summer resort; agricultural produce. Pop. 12,500.

Morshansk', tn., Tambov, central Russia, 58 m. N. of Tambov; centre of grain trade; soap, tallow, glass, tobacco. Pop. 28,000.

Mor'tier Bay, harbour, Newfoundland, 80 m. W. of Cape Race; free port in course of development.

Mortlake, vil. and par., Greater London, on R. Thames; tapestry works; pottery; malting and brewing; terminus of Oxford and Cambridge boat-race course. Pop. 19,000.

Morvi (*mor-vé*), Indian state, Kathiawar, Bombay, India; surface generally flat; grain, sugar, cotton grown. Cap. Morvi. Area, 822 sq. m.; pop. 91,000.

Moscow (*mos'kō*). (1) Prov. of Russia; in basin of R. Volga; surface undulating; chief manufacturing prov. of Russia; centre of Muscovite coalfield; famous limestone quarries; large forest area. Area, 17,992 sq. m.; pop. 4,534,000. (2) Cap. and largest city of Russia and U.S.S.R., on R. Moskva, a sub-trib. of R. Volga. *Kremlin*, or citadel, surrounded by a wall, contains imperial palaces, monasteries; famous Tsar Kolokol bell, and Cathedral of the Assumption (built 1474-9), where Tsars were crowned; univ. and observatory. City has great transit trade and is important industrial centre; manufactures cotton, woollens, silks, leather, machinery, and tobacco; printing trade. Pop. 2,412,000.

Moselle (*mo-sel*). (1) Riv., rises in Vosges Mts., France, flows northward through France, Luxembourg, and Prussian Rhineland, and joins R. Rhine at Coblenz; valley noted for wines; chief tribs. Meurthe and Saar; length, 314 m. (2) Dept., N.E. France, consisting of low plateau drained by R. Moselle and its tribs.; noted for

vineyards and salt deposits; important coal and iron mines giving rise to hardware and other manufactures. Chief tn., Metz. Area, 2,403 sq. m.; pop. 633,000.

Moss, port, wat.-pl., Norway, on Oslo Fiord; sawmills; shipbuilding, and waterproofing. Pop. 8,000.

Mossamedes (*mos-sá-má'des*), port, Portuguese W. Africa; fish curing; guano and nitrate of soda. Pop. 5,000.

Mos'sel Bay, port, Cape Province, S. Africa; sea-bathing; oysters; whaling industry. Pop. 6,000.

Mossend, tn., Lanarkshire, Scotland, 2 m. N.E. of Motherwell; iron and steel works. Pop. 3,500.

Mossley, munic. bor., mkt. tn., Lancs, England, 10 m. N.E. of Manchester; foundries, cotton and woolen mills. Pop. 12,000.

Most (German *Brüx*), tn., N.W. Bohemia, Czechoslovakia; sugar, brewing, chemicals; lignite mines. Pop. 27,000.

Mostaganem, port, Oran, Algeria; flour milling, tanning; trade in grain, wool, hides. Pop. 26,000.

Mostar, tn., Hercegovina, Yugoslavia, on R. Neretva; grapes, wine, tobacco, vegetables. Pop. 18,000.

Mosul (*mo-sool'*). (1) Vilayet, Iraq, mostly to E. of R. Tigris; great oil-field; important agricultural region. Area, 35,130 sq. m.; pop. 703,000. (2) Cap. of above, on R. Tigris; encircled by partly ruined walls; contains great mosque; flour milling; market for grain, fruit, cattle, sheep. Pop. c. 80,000.

Motherwell and Wish'aw, tn., Lanarkshire, Scotland; coal mining; iron and steel works; brick, tile, and fireclay works. Pop. 64,700.

Motril (*mo-tré'*), tn., Granada, Spain, on Mediterranean Sea; cotton, sugar-cane, sugar-beet, and various fruits grown; zinc, lead, copper mined. Pop. 17,000.

Moukden (*mook'den*), cap. of Manchuria, China, on R. Hun-ho; important trade route centre; flour, oil, leather, paper, soap; iron industry developing; univ. Pop. 250,000.

Moulins (*moo-lan'*), cap., Allier, central France, on R. Allier; sawmills; cabinetmaking works; breweries; oil and vinegar. Pop. 20,000.

Moulmein, second seapt. of Burma, at mouth of R. Salween; exports teak, rice, cotton. Pop. 61,000.

Mounds'ville, tn., W. Virginia, U.S.A., on R. Ohio; coal mining; glass, zinc, aeroplanes. Pop. 11,000.

Mountain Ash, urb. dist., Glamorganshire, Wales, 18 m. N.E. of Cardiff; coal mining. Pop. 38,400.

Mount Carmel, bor., Pennsylvania, U.S.A., 45 m. N.E. of Harrisburg; coal mining; shirts and hosiery. Pop. 18,000.

Mountmellick, mkt. tn., Leix co., I.F.S.; malting, tanning. Pop. 2,300.

Mount Morgan, tn., Queensland, Australia, 22 m. S.S.W. of Rockhampton; famous gold mine. Pop. 6,000.

Mount Vernon. (1) City, New York, U.S.A., on R. Bronx, adjoining New York city; favourite residential place. Pop. 61,000. (2) Tn., Illinois, U.S.A., 75 m. E. by S. of St. Louis; lumber, flour, woollen industries; coal in neighbourhood. Pop. 10,000.

Moville, wat.-pl., Donegal, I.F.S., on Lough Foyle, 18 m. N.E. of Londonderry; calling place for American liners. Pop. 1,000.

Mozambique (*mo-zam-bé'*). (1) See PORTUGUESE EAST AFRICA. (2) Prov., Portuguese E. Africa; surface rises gradually from coast, and is thickly forested; sugar, maize, cotton. Area, 293,436 sq. m.; pop. 3,652,000. (3) Port, formerly cap. of above, on island in Mossuril Bay; exports ivory, rubber, ground-nuts, oil-seeds. Pop. 7,500.

Mozdok, tn., N. Caucasian Area, U.S.S.R., on R. Terek; manufactures soap, candles; brick and tile works, distilleries. Pop. 14,000.

Mühlhausen (*mool'haw-zen*), town, Saxony, Prussia, 30 m. N.W. of Erfurt; imperial free city and of great commercial importance in 14th cent.; woollens, cotton, hosiery, furniture, soap, and chemicals. Pop. 36,000.

Mukacevo (*mook'a-chá-vo*), formerly

MUNKACS, tn., Ruthenia, E. Czechoslovakia; iron mines; alum. Pop. 21,000.

Mülheim-am-Rhein (*mool'him*), tn., Rhine prov., Prussia, on R. Rhine; velvet, silk, chemicals, tobacco, brewing, tanning. Pop. 53,000.

Mülheim-an-der-Ruhr (*-roor*), tn., Rhine prov., Prussia, on R. Ruhr; ironworks; leather, tobacco, paper, beer; trade in coal. Pop. 127,000.

Mulhouse (*moo-loos*), formerly **Mülhausen**, tn., Haut-Rhin, France, on R. Ill; industrial centre; manufactures' woollens, cottons, chemicals, machinery, railway materials. Pop. 100,000.

Mull, isl., Hebrides, Argyllshire, w. Scotland; irregular coast-line of c. 300 m. in length; mountainous (Ben More, 3,185 ft.); numerous freshwater lochs; cattle and sheep; tn., Tobermory. Area, 408 sq. m.; pop. 5,000.

Mullingar, mkt. tn., Westmeath, I.F.S.; brewing, tanning; farming centre; angling resort. Pop. 5,300.

Multan. (1) Dist., Punjab, India; alluvial soil; irrigation necessary; wheat, pulses, indigo, cotton. Area, 5,939 sq. m.; pop. 890,000. (2) Tn. in above, on R. Chenab; great trading centre; carpets, pottery, enamel work. Pop. 85,000.

Mumbles, THE. See OYSTERMOUTH.

Muncie (*mun'si*), city, Indiana, U.S.A., on R. White, 50 m. N.E. of Indianapolis; iron and glass manufactures. Pop. 47,000.

Mün'den, tn., Hanover, Germany, 21 m. N.E. of Cassel; rubber, leather; trade in timber; lignite mined. Pop. 12,000.

Mu'nich (German *München*), cap. of Bavaria, Germany, on R. Isar; one of finest and most interesting cities in Europe. Royal Palace, Old Rathaus, Ruhmeshalle (with busts of celebrities), statue of Bavaria, libraries, univ.; art centre; school of painting. Noted breweries; scientific instruments, lithographs, stained glass, leather, paper, rubber goods, furniture, machinery. Pop. 681,000.

Muni River Settlement. See SPANISH GUINEA.

Munkacs. See MUKACEVO.

Mün'ster, cap. of Westphalia, Prussia; cathedral; univ.; cotton, linen, machinery, leather, furniture, pianos; distilling, brewing; wood carving, printing. Pop. 106,000.

Mun'ster, prov., s.w. I.F.S., containing counties Tipperary, Clare, Limerick, Kerry, Cork, and Waterford; mountainous in great part; drained by Rs. Shannon, Lee, Bandon, Blackwater, Suir. Area, 9,317 sq. m.; pop. 970,000.

Muran'o, tn., on isl., Venice, Italy; noted for Venetian glass; fine cathedral. Pop. 5,000.

Murela (*mur'she-a*). (1) S.E. prov. and former kingdom, Spain; mountainous; esparto grass, mulberry trees, cereals, fruit; lead, zinc, coal, sulphur, copper. Area, 4,453 sq. m.; pop. 671,000. (2) Cap. of above, on R. Segura; has cathedral, univ.; manufactures silk, hats, gloves, salt-petre, glass. Pop. 155,000.

Murmansk, prov., Russia, along Arctic coast between Norway and White Sea; shores generally lofty and rocky. Fishing industry is valuable. Chief tn. Murmansk, an ice-free port, connected with Leningrad by rly. built during Great War. Area, 51,200 sq. m.; pop. 23,000.

Murom (*moo'rom*), tn., Vladimir, central Russia, on R. Oka; flour mills, distilleries, cotton and leather factories; iron smelting. Pop. 23,000.

Murray, largest riv., Australia, rises in Australian Alps; forms boundary between Victoria and New South Wales; flows into Encounter Bay by Lake Alexandrina; chief tribs., Rs. Darling and Lachlan; unimportant for navigation; water used for irrigation; length, 1,300 miles.

Murree, hill station, Punjab, India; on s. slopes of Himalaya Mts., c. 20 m. N.E. of Rawalpindi, from which it is reached by motor.

Mürren, vil., Switzerland, on N. slope of Bernese Alps, near the

Jungfrau, 10 m. s. of Interlaken; holiday resort (alt. 5,363 ft.).

Murshidabad. (1) Dist., Bengal, India; largely well-watered plain; rice, oil-seeds, mustard, sugar-cane, indigo. Area, 2,121 sq. m.; pop. 1,488,000. (2) Chief tn. of above, on R. Hooghly; silk weaving, ivory carving, gold and silver embroidery. Pop. 11,000.

Murraq, tn., Italian Libya, N. Africa; caravan station. Pop. 6,500.

Muscat, port, Oman, Arabia; centre of trade with India, Persia, and Africa; surrounded by wall; exports dates, pearls, mother-of-pearl, fish, pomegranates. Pop. (with Matrah), 20,000.

Muscataine, city, Iowa, U.S.A., on R. Mississippi; pearl buttons; lumber manufactures; pork packing and making of preserves. Pop. 16,000.

Muskegon (*mus-ké-gon*), ('grassy bog'), city, Michigan, U.S.A., near L. Michigan; lumber trade and metal manufactures; fruit culture and dairy farming in dist. Pop. 41,000.

Muskogee (*mus-kó-gé*), city, Oklahoma, U.S.A., 125 m. E. of Oklahoma City; cotton gins; railway shops, oil refineries, flour mills. Pop. 32,000.

Muskelburgh, tn., Midlothian, Scotland, at mouth of R. Esk; adjoins Edinburgh; wire, rope, and net works; paper, tiles. Pop. 17,000.

Mussoorie, hill station, United Provinces, India, 70 m. S.E. of Simla; convalescent station for European troops. Pop. 8,000.

Mustagh Range. See KARAKORAM.

Muttra. (1) Dist., United Provinces, India; mainly plain, watered by R. Jumna; cereals, sugar-cane, and some cotton. Area, 1,450 sq. m.; pop. 619,000. (2) Cap. of above, on R. Jumna, 30 m. N.W. of Agra; Hindu religious centre; birthplace of Krishna; has many mosques and temples; paper, brass idols. Pop. 53,000.

Muzaffargarh, dist., Punjab, India,

between rivs. Indus and Chenab; cereals, pulses. Chief tn. Muzaffargarh. Area, 6,052 sq. m.; pop. 568,000.

Muzaffarnagar. (1) Dist., United Provinces, India; cereals, sugar-cane, rice. Area, 1,666 sq. m.; pop. 877,000. (2) Chief tn. of above, 35 m. N. of Meerut; blankets. Pop. 24,000.

Muzaffarpur. (1) Dist., Bihar, India; fertile plain, well irrigated by numerous streams; rice, cereals, pulses, sugar-cane; saltpetre. Area 3,036 sq. m.; pop. 2,755,000. (2) Chief tn. of above, 40 m. N. of Patna; carpets, matting, castor oil. Pop. 33,000.

Mweru (*mud'roo*), lake, Central Africa, between Belgian Congo and N. Rhodesia, traversed by R. Luapula; length, 68 m.; breadth, 24 m.; reached by Livingstone (1867).

Mymensingh. (1) Dist., Bengal, India; mostly alluvial plain; rice, jute, pulses. Area, 6,338 sq. m.; pop. 4,838,000. (2) See NASIRABAD (1).

Mynyddislwyn (*mün'úth-ís-loo-ün*), urb. dist., Mon, England, 10 m. N.W. of Newport; collieries; ironworks. Pop. 16,200.

Myslowice (*mis-wor-it'se*), tn., Silesia, Poland, 110 m. S.E. of Breslau; collieries; rly. jn.; flax mills; bricks. Pop. 17,800.

Mysore (*mí'sör*). (1) Indian state in S. India; almost entirely enclosed by Madras Presidency; region consists of tableland broken by hill ranges and valleys; chief rivs., Kistna and Cauvery; productions include coffee, sugar-cane, cotton, rice, silk, cinchona, sandalwood, and ivory; gold is mined at Kolar. Area, 29,607 sq. m.; pop. 5,860,000. (2) Cap. of above, 240 m. S.W. of Madras; univ. (1916); carpet weaving. Pop. 84,000.

Mytholmroyd (*mí'them-roid*), urb. dist., W. Riding, Yorks, England, 5 m. W. of Halifax; worsted; cotton. Pop. 4,500.

Mytilene. See LESBOS.

N

Naas (*nās* or *nā'as*), mkt. tn., co. Kildare, I.F.S.; once residence of kings of Leinster. Pop. 3,400.

Nabha (*nā'bhā*). (1) Indian state, Punjab, India; large portion irrigated by Sirhind Canal; cereals, pulses, cotton, sugar-cane; manufactures gold and silver ware, brass vessels, cotton carpets. Area, c. 1,000 sq. m.; pop. 263,000. (2) Tn., cap. of above, 130 m. N.N.W. of Delhi; surrounded by mud wall. Pop. 15,000.

Nabius (*nā-bloos'*), (anc. *Shechem*), tn., Palestine, 30 m. N. of Jerusalem; in valley between Mts. Ebal and Gerizim; manufactures soap. Pop. 16,000.

Nabua (*nāb'wā*), tn., Luzon, Philippines, 20 m. S.E. of Nueva Caceres; rice and sugar. Pop. 19,000.

Nā'ga Hills, dist., extreme E. of Assam, India; hilly; densely forested; abounds in game; coal, iron, and petroleum are found but little worked. Area, 3,115 sq. m.; pop. 160,000.

Nagasak'i, seapt., S.W. Kyushu, Japan; fine natural harbour; ship-building and engineering important; coaling station; manufactures enamelled pottery, lacquer, and tortoise-shell ware; exports fish, coal, textiles. Pop. 190,000.

Nagina (*nā-gē'na*), tn., United Provinces, India, 32 m. N.E. of Meerut; carved ebony wares, glass, and lacquered goods. Pop. 19,000.

Nagoya (*nā'gō-yū*), tn., Honshu, Japan, 94 m. N.E. of Kyoto; pottery, cloisonné enamels, lacquer wares, straw plait, textiles. Pop. 768,000.

Nagpur. (1) Div., Central Provs., India; large plain S. of Satpura ranges. Area, 23,521 sq. m.; pop. c. 3,000,000. (2) Dist. of above; cereals, cotton, rice; manganese. Area, 3,834 sq. m.; pop. 792,000. (3) Cap. of Central Provinces, 440 m. by rail E.N.E. of Bombay; trade in grain, salt; cotton weaving. Pop. 145,000.

Nagy Becskerek. See BECKEREK, VELIKI.

Nagykanizsa (*noj-kan-it'sa*), town, Hungary, 20 m. S. of L. Balaton; brick works, flour mills, distilleries, and breweries; formerly important fortress. Pop. 30,000.

Nagykaroly. See CAREL.

Nagy-Kikinda. See KIKINDA, VELIKA.

Nagy-Körös (*noj'koo-roosh*), mkt. tn., Hungary, c. 50 m. S.E. of Budapest; vineyards; melons. Pop. 27,000.

Nagy-Ezalonta. See SALONTA.

Nagy-Szombat. See TRNAVA.

Nagy-Varad. See ORADEA.

Nails'worth, par. and tn., Gloucestershire, England, 4 m. S. of Stroud; paper, textiles. Pop. 3,100.

Naini Tal (*nā'ni tāl*). (1) Dist., United Provinces; hilly and largely forest-clad; rice, wheat, tea, and fruit. Area, 2,721 sq. m.; pop. 277,000. (2) Hill station in above, in Himalayas, 120 m. E.N.E. of Meerut; summer residence of lieut.-governor of United Provinces. Pop. 10,000.

Nairn, royal burgh, seaport and co. tn., Nairnshire, Scotland; dry and bracing climate; summer resort; fishing. Pop. 4,200.

Nairn'shire, mar. co., Scotland, bounded by Moray Firth, Moray and Inverness-shire; near coast is fertile and well-wooded, other parts principally moorland; largest rivers, Findhorn and Nairn; agriculture, grazing, and fishing; sandstone and granite quarries. Chief tn., Nairn. Area, 163 sq. m.; pop. 8,300.

Nairobi (*nā-rō'bi*), cap., Kenya Colony, Brit. East Africa; 5,452 ft. high; fine climate; on Uganda Rly.; important trade centre; well-built town with many fine buildings. Pop. 33,000.

Nakhichevan (*na-chā-shev-ān'*). (1) Rep., Transcaucasia, U.S.S.R.; is bounded on S. and W. by Persia, and

on N. and E. by Armenia; centre for trade between Russia and Persia; chief products, silk, cotton, wine, and salt. Area, 2,488 sq. m.; pop. 103,000. (2) Cap. of above, near R. Aras; flour-milling and leather manufacture. Pop. 9,000.

Nakhichevan-on-the-Don, tn., N. Caucasian Area, U.S.S.R., on R. Don; Armenian cathedral; smelting, rope-making, cotton and silk manufactures. Pop. 71,000.

Naks'kov, seaport, Denmark, on w. coast of Laaland Island; has fine harbour; shipbuilding and sugar refining. Pop. 14,000.

Namangan', tn., Uzbek, U.S.S.R.; in valley of Sir Darya R.; market for sheep and cotton; coal and petroleum. Pop. 74,000.

Namaqualand (*na-mul'kwá-land*), region in s.w. of Africa, stretching along the coast from the neighbourhood of Walvis Bay to 31° S.; divided by the Orange R. into **LITTLE NAMAQUALAND**, part of the province of Cape of Good Hope, and **GREAT NAMAQUALAND**, part of S.W. Africa.

Namur'. (1) Hilly and fertile prov., Belgium; drained Rs. Maas and Sambre; one-third of surface forested; rich in iron, coal. Area, 1,414 sq. m.; pop. 353,000. (2) Cap. of above, at junction of Rs. Maas and Sambre; strongly fortified; has 18th cent. cathedral; iron and steel, cutlery, glass, and firearms. Pop. 31,000.

Nansimo (*na-ni'mó*), city, E. coast of Vancouver Island, Brit. Columbia; exports coal; timber cutting, brewing, and fruit canning. Pop. 9,000.

Nanchang, cap. of province of Kiangsi, China, on R. Kan; trade in tea, rice, and cotton. Pop. c. 400,000.

Nancy (*nan-sé'*), cap., Meurthe-et-Moselle, France, on R. Meurthe; fine churches, old gateways, ducal palace, picture gallery, univ.; chief manufactures, cottons, woollens, paper, iron, chemicals, artificial flowers; famed for embroidery; important railway centre. Pop. 108,000.

Nan'áer, tn., Hyderabad, India, on

R. Godavari; muslin, gold-broidered scarves. Pop. c. 14,000.

Nandga'on, Indian state, Central Provinces, India; w. part hilly and forested; E., fertile plain; rice, wheat, linseed. Cap. Raj-Nandgaon, 120 m. E. of Nagpur. Area, c. 900 sq. m.; pop. c. 127,000.

Nanking', cap. of China, since 1928; on Yangtze Kiang; once famous for great walls and magnificent buildings, destroyed by Taiping rebels (1853-64); treaty port since 1899; silk manufactures; exports silk, hides, and frozen meat; connected with Shanghai by railway. Pop. (est.) 497,000.

Nanning', treaty port, Kwangsi, China, on Yu-Kiang; exports aniseed, beans, rice, leather, antimony. Pop. (est.) 74,000.

Nanterre (*non-ter'*), town, Seine, France, 7 m. N.W. of Paris; chemicals, aluminium, tallow. Pop. 31,000.

Nantes (*nant*), cap., Loire-Inférieure, France; on R. Loire, which permits of ships drawing 20 ft. to reach the town; exports include machinery and iron ore. Chief industries, sugar refining and manufacture of oil, soap, chemicals, leather, machinery, and textiles. Pop. 166,000.

Nan'ticoke, town, Pennsylvania, U.S.A., on R. Susquehanna, 8 m. S.W. of Wilkes-Barre; anthracite coal; hosiery, canned goods. Pop. 26,000.

Nantucket Island, isl., Massachusetts, U.S.A.; sandy, rolling, and treeless; has several summer resorts; Nantucket tn. on N. shore. Formerly chief whaling centre. Length, 15 m.

Nant'wich, tn., Cheshire, England, 4 m. S.W. of Crewe; boot and shoe manufactures; cheese; brine baths; cruciform church and old grammar school. Pop. 7,100.

Nantyglo. See **BLATNA**.

Napier (*ná'pi-er*), seapt., North Island, New Zealand, on Hawke Bay; exports tinned and frozen meat. Severe earthquake, 1931. Pop. 19,000.

Na'ples. (1) Prov., Campania, Italy; smallest and most densely populated prov. in Italy; contains Mt. Vesuvius in S., rich volcanic soil in N., vine-

yards; oil, corn, hemp, cotton, chest-nuts. Area, 1,204 sq. m.; pop. 2,180,000. (2) Cap. of above; beautifully situated on Bay of Naples, at base of Vesuvius; consists of old and new town; numerous churches and palaces with paintings and sculptures. Surroundings include Pompeii, Herculaneum, Sorrento, and the islands of Capri and Ischia. Second seaport of Italy and great trading centre; manufactures macaroni and vermicelli, wine, olive oil, chemicals, textiles, lace, leather, paper, furniture, majolica wares, musical instruments, and perfumery. Shipbuilding is also carried on. Pop. (est.) 966,000.

Nāra, tn., Honshu, Japan, 25 m. E. of Osaka; has beautiful temples, a huge bell (37 tons), and statue of Buddha; cap. of Japan from 709 till 784; fans, toys. Pop. 54,000.

Narayanganj (*nā-rā-yan-gunj*), tn., Bengal, India, 10 m. S. of Dacca; entrepôt for jute distributing centre. Pop. c. 25,000.

Narbāda, sacred river, India; flows into Gulf of Cambay; upper course much broken by rapids; sea-going vessels ascend 50 m.; length, c. 800 m.

Narbonne (*nar-bon*), tn., Aude, France, near Gulf of Lions; cathedral, and archbishop's palace, now partly used as a museum; honey, red wine, sulphur, tiles. Pop. 25,000.

Narni (*nar'nā*), tn., Perugia, Italy, 65 m. N. of Rome; mineral springs; manufactures linoleum and calcium carbide. Pop. 14,000.

Narva, seaport tn., Estonia; manufactures cotton goods; exports textiles and timber. Pop. 27,000.

Narvik, or VICTORIAHAVN, ice-free port, on Ofoten Fjord, N.W. Norway; exports iron ore from Swedish districts served by Lapland railway. Pop. 7,000.

Naseby (*nas'bi*), vil., Northamptonshire, England, 10 m. N.N.W. of Northampton; scene of Royalist defeat by Roundheads (1645). Pop. 400.

Nashua, city, New Hampshire,

U.S.A., 30 m. S. of Concord; manufactures cotton, carpets, refrigerators, steam engines. Pop. 31,000.

Nashville, cap. of Tennessee, U.S.A., on Cumberland R.; important educational centre; extensive trade; manufactures flour, cotton, saddlery, fertilizers, soap, agricultural implements, furniture, and timber produce. Pop. 153,000.

Nāsik. (1) Dist., Bombay, India; western part hilly, eastern fertile and well cultivated; wheat, millet, pulses, rice, oil-seeds, cotton. Area, 5,877 sq. m.; pop. 832,000. (2) Cap. of above, on R. Godavari; resort of Hindu pilgrims; cotton weaving, brass and copper work. Pop. 38,000.

Nasirabad (*na-zēr-a-bād*). (1) Formerly MYMENSINGH, cap. of Mymensingh dist., tn., Bengal, India, 70 m. N. of Dacca; oil pressing, carpet-weaving; cane chairs. Pop. 15,000. (2) Tn., Rajputana, India, 12 m. S.E. of Ajmer; military station. Pop. 22,000.

Nassau. (1) (*nā'sou*) Dist., Hesse-Nassau, Prussia, bounded S. and W. by R. Rhine and Main, N. by Westphalia, E. by Hesse; surface mountainous; mineral springs; wines. Cap. Wiesbaden. Area, 1,830 sq. m. (2) (*nā-sō*) Seapt., cap. of Bahama Islands, on New Providence I.; winter resort; trades in sponges, pearls, sisal fibre, fruit. Pop. 13,000.

Natal. (1) Prov., Union of S. Africa, on S.E. coast; bounded on S.W. by Cape Prov., W. by Basutoland and Orange Free State, N. by Transvaal and Port. E. Africa; coast-line, c. 370 m. Surface rises over 5,000 ft. in series of terraces with many hills and valleys to Drakensberg Mts. on W.; numerous rivers and streams (chief Tugela), but none navigable. Climate healthy; coast districts semi-tropical, but practically fever-free; more bracing farther N.; heavy summer rains, Sept. to March; frequent thunderstorms; dry, sunny winter. Most important industry is sheep farming, in midland and upland districts. Cattle are reared every-

where. Angora goats and horses thrive in higher regions. On coastal belt sugar-cane, coffee, tea, and cotton are grown, plantations being worked by Indian coolies; wheat is limited to Upper Tugela districts; wattle bark in midlands; maize is chief grain crop; orchards are mostly in the coastal belt; bananas, pineapples, citrus fruits exported; other products include kaffir corn, tobacco, lucerne, sweet potatoes, and vegetables. Irrigation is easy. Chief mineral, coal, at Newcastle and Dundee. Copper, gold, silver, iron, nickel, manganese, tin, asbestos, gypsum, limestone, and oil shale also found. Manufactures are few and small. Fish abound in coastal waters. Chief tns., Pietermaritzburg (cap.), and Durban. Area (including Zululand), 35,284 sq. m.; pop. (white) 137,000, (coloured) 1,292,000. (2) Cap. of Rio Grande do Norte, Brazil; seapt.; exports cottons, sugar. Pop. 30,000.

Natchez (*nach'ez*), tn., Mississippi, U.S.A., on Mississippi R.; active river trade in cotton, cotton products, and cattle; sawmills. Pop. 12,000.

Na'tron Lakes, or SODA LAKES, group of lakes, Libyan Desert, Lower Egypt, 60 m. n.w. of Cairo; waters charged with salt, sodium carbonate, and sodium sulphate.

Naugatuck (*naw'ga-tuk*), tn., Connecticut, U.S.A., 25 m. n.w. of New Haven; rubber goods, safety pins, aeroplanes, and iron castings. Pop. 15,000.

Nausheim (*nau'him*), or BAD NAUSHEIM, wat.-pl., N. Hesse, Germany, on N.E. slopes of Taunus Mts.; saline springs, used in rheumatic and heart affections. Pop. 9,000.

Naumburg (*nau'm'boorg*), tn., Saxony, Prussia, on R. Saale, 22 m. s.s.w. of Halle; 13th cent. cathedral; leather goods, woollens, combs. Pop. 29,000.

Naur'u (*na-oor'oo*), isl. in Pacific Ocean, 400 m. s. of Marshall Islands. Under mandate of Brit. Empire. Has largest reserves of high-grade phosphates in world. Area, c. 8 sq. m.; pop. 2,600.

(3,601)

Nausahra (*nou-shā-rā'*), tn. and cantonment, N.W. Frontier Province, India, 25 m. E. of Peshawar. Pop. c. 10,000.

Nav'an, mkt. tn., co. Meath, I.F.S.; woollen, flour, and bacon industries. Pop. 3,700.

Navanagar (*na-wan-ug'ur*), or JAMNAGAR. (1) Indian state, Bombay, India; flat surface; grain, cotton, and oil-seeds. Area, 3,791 sq. m.; pop. 345,000. (2) Cap. of above, on Gulf of Cutch; silk and gold embroidery; locomotive works. Pop. 42,000.

Navarre (*na-vār'*), or NAVARRA, prov., N. Spain; traversed by Pyrenees and Cantabrian Mts.; chief rivers, Ebro, Aragon, Bidassoa. Chief products, grain, olives, fruits, red wine; cattle rearing; silver-lead and copper mines; iron ore and salt found. Chief town, Pamplona. Area, 4,055 sq. m.; pop. 330,000.

Navigators' Islands. See SAMOA.

Navari', tn., Baroda, India; c. 150 m. N. of Bombay; metal work; boots and shoes; cotton weaving. Large Parsee colony. Pop. 19,000.

Naxos, isl., Aegean Sea; largest and most fertile of the Cyclades; wine, fruits, emery. Pop. c. 17,000.

Nazareth, tn., Galilee, Palestine; 1,600 ft. above sea-level; in fertile dist. Here Jesus lived till He commenced His public ministry. Pop. 7,000.

Naze, THE (*nāz*). (1) Headland in Essex, England, 5 m. S. of Harwich. (2) Cape, most S. point of Norway.

Neagh, LOUGH (*nā*), lake, N. Ireland; largest lake in Brit. Isles; has a few small islands; receives Upper Bann R.; drained by Lower Bann R.; abounds in fish; 17 by 11 m.; area, 153 sq. m.

Neath (*nēth*), port, Glamorganshire, Wales; has copper, tinplate, engineering, chemical, and ironfounding works; exports local mineral products; site of ruined abbey and castle; near by is an anc. stone circle. Pop. 33,300.

Nebras'ka, N. Central State, U.S.A., bounded N. by South Dakota, W. by Wyoming, S.W. by Colorado, S. by

Kansas, E. by Missouri and Iowa. Surface an undulating plain. Mountains in W. belong to Rocky Mountain system; large stretch of sand-hills in N. covering c. 20,000 sq. m.; extensive prairies in E. and S.; swamps in S.E. Principal rivers are Missouri (on eastern border), Platte and Niobrara. Climate healthy, with dry fine atmosphere; average annual rainfall c. 23 in.; agriculture important; chief products, maize, wheat, oats, hay, potatoes, apples, sugar-beet, live-stock, and wool; large quantities of potash are obtained from Alkali Lakes of the state. Chief industries are slaughtering and meat packing. Extensive irrigation. Principal towns are Omaha, Lincoln (cap.), South Omaha. Area, 77,510 sq. m.; pop. 1,296,000.

Neckar, riv. of S. Germany; joins the Rhine at Mannheim; canalized in parts; steam navigation to Cannstatt; length, 247 m.

Needles, THE, three chalk pinnacles at W. point of Isle of Wight, England; denudation reducing them gradually; lighthouse on most westerly.

Negapatam, seaport, Madras, India, on R. Cauvery delta; trades with Rangoon and Straits Settlements; exports ground-nuts, cotton, and tobacco. Pop. 54,000.

Negri Sembilan ('nine states'), state, Malay Peninsula, on Strait of Malacca; under British protection; produces tin, coffee, tapioca, rice. Cap. Seremban. Area, 2,550 sq. m.; pop. 179,000.

Neilton (*nēl'stōn*), town, Renfrewshire, Scotland, 4 m. S. of Paisley; print works, bleachfields, cotton spinning. Pop. 3,500.

Neisse (*nē'sa*), tn., Silesia, Prussia, 50 m. S.E. of Breslau; 12th cent. Gothic church; linen and chemicals. Pop. 32,000.

Nejd (*nezhā*), kingdom (including Hejaz), Arabia, bounded by Trans-Jordan, Iraq, Persian Gulf, Aden, Yemen, and Red Sea; surface mostly sandy desert, with occasional oases where soil is fertile; chief riv. basins

are Wadi Rumma and Wadi Dawasir; horses, camels, and sheep reared; chief products are dates, wheat, barley, and fruits; chief towns, Hufuf and Riyadh. Area, c. 200,000 sq. m.; pop. c. 3,000,000.

Nellore. (1) Dist., Madras, India; rice, pulses, millet; mica and iron occur. Area, 7,973 sq. m.; pop. c. 1,500,000. (2) Cap. of above, 110 m. N. of Madras; dyeing and rice-husking industries. Pop. 36,000.

Nelson. (1) Munic. bor., Lancashire, England, 3 m. N.E. of Burnley; cotton and other textiles; coal mining. Pop. 38,300. (2) Provincial dist., South Island, New Zealand; mountainous; well timbered; fruit, hops; coal, gold, iron, lead, silver, copper ores. Area, 10,875 sq. m.; pop. 51,000. (3) Cap. of above, on N. coast; jam making. Pop. 12,000. (4) Tn., Brit. Columbia, Canada, on Kootenay Lake; silver mining, lumbering; fruit, vegetables. Pop. 5,000. (5) Riv., Canada; issues from Lake Winnipeg and discharges into Hudson Bay at Port Nelson. Length, c. 500 m. Navigable for c. 100 m.

Nemi (*nē'mē*), lake, Alban Hills, Italy, 20 m. S. of Rome; occupies volcanic crater (alt. 1,060 ft.); in surrounding woods Diana was worshipped; anc. Roman galley of Emperor Caligula was recovered from lake in 1930.

Nenagh (*nē'na*), mkt. tn., co. Tipperary, I.F.S.; has agricultural trade; remains of anc. castle. Pop. 4,500.

Nepal, NEPAUL, or NIPAL (*ne-pawl*), independent state in N.E. of India, bounded N. by Tibet, W. by United Provs., S. by United Provs. and Bihar and Orissa, and E. by Bengal and Sikkim. Lofty and mountainous region in N., containing part of Himalayas with some of highest summits in world (Mount Everest, Kinchinjunga, and Dhaulagiri). In S. fertile and cultivated country, called *Tarai*. State is watered principally by Rs. Gogra, Gandak, Sun Kosi, and their tributaries. Great variety of flora and fauna; cotton, rice, maize, wheat,

barley, oats, pulse, hemp, sugar-cane, tobacco, dyes, drugs, vegetables, fruits, and flowers are cultivated; forests produce fine timber. Among wild animals are tiger, leopard, wolf, hyena, rhinoceros, and elephant. Chief occupation is agriculture. Communication is in a backward state. State is inhabited by several different tribes, most important being warlike Gurkhas. Cap. Katmandu. Area, c. 54,000 sq. m.; pop. c. 5,600,000.

Nerbudda. See NARBADA.

Ness, Loch, lake, Inverness, Scotland; length, 22 m.; depth, 106 to 130 fathoms; forms part of Caledonian Canal route through Glenmore.

Newton. See PARAGATE.

Netherlands. See HOLLAND.

Netley, par. and vil., Hampshire, England, on Southampton Water; military hospital, leading centre of military ambulance training; ruined abbey. Pop. 1,400.

Neu-Brandenburg (*noi-brand'en-boorg*), tn., Mecklenburg-Strelitz, N. Germany, on Lake Tollense; machinery and chemical products. Pop. 14,000.

Neuchâtel (*noo-shat-el'*). (1) Canton, w. Switzerland. Surface chiefly mountainous, Jura range crossing canton; chief rivers, Doubs and Thièle. Cattle are reared. Manufactures watches; cheese, cotton, hosiery, cutlery, electrical appliances, wine, and chocolate. Chief tns., Neuchâtel, La Chaux de Fonds, and Le Locle. Area, 305 sq. m.; pop. 131,000. (2) Cap. of above, on L. Neuchâtel; anc. castle and cathedral; educational establishments; watches, jewellery; condensed milk. Pop. 23,000. (3) LAKE OF, Switzerland; largest lake entirely in Swiss territory; depth, 505 ft.; area, 92 sq. m.

Neuilly-sur-Seine (*noo-ē-yē-soor-sân*), w. suburb, Paris, France; embossed leather, carpets, automobiles, perfumes, and chocolate. Pop. 50,000.

Neu-Mecklenburg. See NEW IRELAND.

Neumünster (*noi-moon'ster*), town, Schleswig-Holstein, Prussia, 20 m. s.

by w. of Kiel; important tanning industry. Pop. 40,000.

Neunkirchen (*noin-kēr'chen*), tn., Rhine prov., Prussia, 38 m. s.w. of Trier; ironworks and collieries. Pop. 35,000.

Neu-Pommern. See NEW BRITAIN.

Neuquen (*nā-oo-ken'*), terr., Argentina, S. America, on Chilean frontier; mountainous; cattle, horses, sheep raised. Cap. Neuquen, c. 300 m. w. of Bahía Blanca. Area, 40,530 sq. m.; pop. 29,000.

Neusalz (*noi'salts*), tn., N. Silesia, Prussia, on R. Oder; flax mills, breweries, shipyards, and ironworks. Pop. 14,000.

Neuss (*nois*), tn., Rhineland, Prussia, 7 m. s.w. of Düsseldorf; iron goods, flour, textiles. Pop. 45,000.

Neustadt (*noi'stat*), tn., S. Silesia, Prussia; tanneries; carpets, textiles, shoes, and dyes. Pop. 17,000.

Neustadt-an-der-Haardt (*noi'stat-ander-hart*), tn., Bavarian Palatinate, Germany, 17 m. s.w. of Mannheim; wine, cloth, paper; school of viticulture. Pop. 21,000.

Neu-Stettin (*noi-stet-ën'*), tn., Pomerania, Prussia; iron foundries; dyeworks, sawmills; trade in cattle, agricultural produce. Pop. 15,000.

Neu-Strelitz (*noi-strä'lits*), cap. Mecklenburg-Strelitz, N. Germany; iron manufactures, distilleries, furniture factories. Pop. 12,000.

Neuwied (*noi'vêl*), tn., Rhineland, Prussia, on R. Rhine, 9 m. n.w. of Coblenz; tobacco, sugar, chicory, and buttons; ironfounding; famous Moravian schools. Pop. 20,000.

Ne'va, riv., N.W. Russia, flows from Lake Ladoga into Gulf of Finland; ice-free for seven months; lower course navigable by large vessels; length, 40 m.; Leningrad at mouth.

Nev'ada, Western State, U.S.A., bounded N. by Idaho and Oregon, W. and S. by California, E. by Arizona and Utah. Except in N.E. and S.E., lies wholly in Great Basin, which consists of elevated plateau; principal ranges are E. Humboldt Mts., Washoe Mts. (branch from Sierra Nevada), Toyabe

Mts., Humboldt Mts., and White Pine Mts. Lakes are numerous and generally salt; hot and cold springs are frequent; valleys generally desert. In s.e. are Virgin and Colorado rivers; rivers belonging to Great Basin lose themselves in lakes or sink, to reappear farther on; longest and most important river is Humboldt, flowing into Humboldt Lake. On account of dry climate agriculture depends much on irrigation; grain, hay, butter, vegetables, and fruits are produced; stock raising is a rising industry. Nevada is one of richest states in mineral wealth; gold and silver; also copper, lead, zinc, quicksilver, antimony, sulphur, gypsum, borax. Chief towns, Carson (cap.), Reno, and Virginia. Area, 110,690 sq. m.; pop. 77,000.

Nevers (*ne-vîr*), chief tn., Nièvre, France, on R. Loire; cathedral dating from 11th cent.; iron goods, agricultural implements, majolica pottery. Pop. 27,000.

Nevis, wat.-pl., Carnarvonshire, N. Wales; fishing. Pop. 1,900.

Nevis (*ne-vîs*), isl., Leeward group, Brit. W. Indies; mountainous; subject to hurricanes; exports cotton, coconuts, sugar. Cap. Charlestown. Area, 50 sq. m.; pop. 13,000.

Nevis, BEN. See BEN NEVIS.

New Abbey, vil., Kirkcudbrightshire, Scotland, 10 m. s. of Dumfries; ruins of Sweetheart Abbey. Pop. 730.

New Albany, city, Indiana, U.S.A., on Ohio R.; manufactures leather, furniture, foundry and machine-shop products. Pop. 26,000.

Newark. (1) Munic. bor., Notts, England, on R. Trent; trade in corn and malt; agricultural implements, beer, plaster of Paris; gypsum and limestone quarries. Pop. 18,100. (2) City, New Jersey, U.S.A.; largest city in state; educational centre; manufactures foundry and machine-shop goods, chemicals, leather, jewellery. Pop. 443,000. (3) City, Ohio, U.S.A., 33 m. E. of Columbus; manufactures steel rails, locomotives, glassware, motor-cars. Pop. 30,000.

New Bedford, port, Massachusetts, U.S.A., on Acushnet estuary; extensive trade; formerly chief port of whale fisheries; manufactures cotton, lubricating oils, cordage, shoes, glass, paints. Pop. 113,000.

Newbiggin, urb. dist., Northumberland, England, 9 m. E. of Morpeth; wat.-pl.; fishing; coal mines in neighbourhood. Pop. 6,900.

New Brighton, tn., Cheshire, England, on Wirral peninsula; favourite wat.-pl.; ferry to Liverpool. Part of Wallasey.

New Britain. (1) Formerly *Neu Pommern*, largest island in Bismarck Archipelago, N.E. of New Guinea in W. Pacific, and includes, in addition to New Britain, New Ireland, Lavongai, and various subsidiary groups. New Britain is very mountainous; dense vegetation; interior almost unknown; climate unhealthy; Gazelle Peninsula, in N., well developed; coconuts, cocoa, and coffee are produced. Administered by Australia under mandate. Chief town, Rabaul. Area, 10,000 sq. m.; pop. c. 82,000. (2) City, Connecticut, U.S.A., 9 m. S.W. of Hartford; hardware; foundry and machine-shop goods. Pop. 68,000.

New Brunswick. (1) Mar. Prov., Canada, bounded by Quebec, Gulf of St. Lawrence (N.), Quebec and Maine (W.), Bay of Fundy (S.), Nova Scotia, Gulf of St. Lawrence (E.); connected with Nova Scotia by isthmus of Chignecto; seaboard, about 600 m., has excellent harbours; extensive forests; chief rivers are St. John, Miramichi, and Restigouche; surface undulating; numerous small lakes. Chief industries, agriculture, lumbering, and fishing. Coal is mined, and gypsum quarried; oil and natural gas are found. Chief towns, Fredericton (cap.), Saint John, and Moncton. Area, 27,985 sq. m.; pop. 388,000. (2) Tn., New Jersey, U.S.A., 23 m. S.W. of Newark; R.C. cathedral; rubber goods, hardware, hosiery. Pop. 34,000.

Newburgh. (1) Royal burgh, Fife, Scotland, on Firth of Tay; manu-

factures linen and floorcloth; important salmon fisheries; fruit dist. Pop. 2,200. (2) City, New York, U.S.A., on Hudson R.; manufactures chemicals, cotton and woollen goods, flour, machinery. Pop. 31,000.

Newburn, urban dist., Northumberland, England, on R. Tyne; coal mines, ironworks. Pop. 19,500.

Newbury, munic. bor., mkt. tn., Berkshire, England, on R. Kennet; Jacobean Cloth Hall is a relic of trade in malt and wool; fossils and antiquarian objects obtained from peat bed. Pop. 13,300.

Newburyport, city, Massachusetts, U.S.A., 40 m. N. of Boston; textiles, boots and shoes. Pop. 16,000.

New Caledonia, French isl. in South Pacific, 700 m. E. of Queensland; mountainous and forested; has penal settlement at Nou I., but no convicts sent there since 1895. Dependencies of New Caledonia are Isle of Pines, Wallis Archipelago, Loyalty Islands, Huon Islands, Futuna, and Alofi. Chief exports, coffee, copra, cotton, maize, tobacco, fruits; much mineral wealth, chrome, cobalt, nickel, iron, and manganese being particularly abundant. Cap. Numea. Area, 8,548 sq. m.; pop. 47,000.

Newcastle. (1) Seaport, co. Down, N. Ireland; holiday resort; fishing. Pop. 2,100. (2) Tn., New South Wales, Australia; at mouth of Hunter R.; exports coal, wool, frozen meat; chief coal port of Australia; smelting works, iron foundries; engineering and shipbuilding. Pop. 103,000. (3) Tn., New Brunswick, Canada, on R. Miramichi; trade in lumber and fish; centre of big game district; wireless station. Pop. 3,000.

New Castle, city, Pennsylvania, U.S.A., 50 m. N.W. of Pittsburgh; iron and coal; manufactures tinplate, iron, glass, steel wire; agricultural produce. Pop. 49,000.

Newcastle-under-Lyme, munic. bor., Staffordshire, England; manufactures cotton goods, clothing, and paper; close to the Potteries. Pop. 23,200.

Newcastle-upon-Tyne, co. tn., North-

umberland, England, on R. Tyne; anc. town, now one of chief commercial centres in England, owing to mineral products in vicinity; connected by bridges with Gateshead, on opposite bank of river. Castle, erected 12th cent.; many fine churches. Shipbuilding is main industry; chief export, coal; manufactures include iron, steel, machinery, glass, earthenware, chemicals. Pop. 283,100.

Newchwang, seapt., Manchuria, China; on Gulf of Liaotung; a treaty port, trading in beans, maize, cotton seed, and coal; manufactures cotton goods, hosiery, soap, and glass; important fisheries. Pop. 65,000.

New Don'gola, tn., Anglo-Egyptian Sudan, Africa, on R. Nile, 750 m. S. of Cairo; important trading station and military depot.

New England, name given to six states in N.E. of U.S.A., Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut. Named New England by Captain Smith (1614); first successful settlement by Puritans from England was made at Plymouth (1620). Area, 61,976 sq. m.

New Forest, dist., Hampshire, England, W. of Southampton Water; well wooded, with beautiful scenery; greater part (100 sq. m.) is crown property; in S.E. are ruins of Beaulieu Abbey, founded by King John; chief village is Lyndhurst, near centre.

Newfoundland, isl., N. America; Britain's oldest colony; off mouth of R. St. Lawrence; separated from Labrador by Strait of Belle Isle (11 m. wide), and from Cape Breton I. by Cabot Strait (65 m. wide). Shape roughly triangular. Coast-line much broken and surface rugged; interior a low plateau. There are innumerable lakes, about one-third of surface being water; largest lakes, Grand and Red Indian. Climate milder than that of Canada; fogs frequent. Spruce and pine forests in various parts; over 90 per cent. of adult pop. engaged in fishing, cod fisheries being staple resource; also seal, salmon, and herring

fishing; considerable lumber trade; important pulp and paper mills. Minerals include iron (Bell I.), copper, asbestos, lead, coal, silver, gold. Railway mileage, 905. Chief towns are St. John's (cap.), Harbour Grace, and Bonavista. Area, 42,734 sq. m.; pop. 266,000. Colony now includes E. part of peninsula of Labrador (110,000 sq. m.; pop. 4,000).

New Glasgow, city, Nova Scotia, Canada, 10 m. S.E. of Pictou; in Pictou coalfield area; iron and steel works. Pop. 10,000.

New Guinea, second largest isl. in the world, N. of Australia, in W. Pacific; separated from Australia by Torres Strait and Arafura Sea; length about 1,500 m.; breadth, 480 m.; area, c. 312,000 sq. m. Northern part is almost separated from remainder by MacCluer Inlet; western half and interior still mostly unexplored. Coast-line much indented with many fine harbours. High mountain ranges form a more or less well-defined chain running through centre of island. Chief rivers are Mamberamo, Sepik, Fly, and Digui. Rainfall heavy; temperature high; climate unhealthy for Europeans. Vegetation abundant; type varies according to height. Island is inhabited by Papuans mixed with Malays and Polynesians, and is notorious for head hunting and savage tribes. Politically New Guinea is divided into three territories—British New Guinea or Territory of Papua in S.E.; Mandated Territory of New Guinea, administered by the Commonwealth Government of Australia, in N.E.; and Dutch New Guinea in W.

Territory of Papua includes D'Entrecasteaux and Louisiade groups; Commonwealth of Australia assumed control (1901). Gold mining is important; petroleum wells discovered (1919); chief exports, rubber, osmiridium, gold, copra, and various tropical products. Cap. Port Moresby. Area, c. 90,540 sq. m.; pop. 276,000.

Mandated Territory of New Guinea, formerly German New Guinea, in-

cludes Kaiser Wilhelm's Land (area, 68,500 sq. m.), Bismarck Archipelago, Solomon Islands, and Nauru. Chief products are copra, gold, timber, mother-of-pearl, coffee, cocoa, sandalwood, and tortoise-shell. Cap. Rabaul, in New Britain. Total area, 76,000 sq. m.; pop. 747,000.

Dutch New Guinea has never been wholly explored, and is practically undeveloped. There are a few trading and mission stations, the chief being at Merauke. Area, 160,692 sq. m.; pop. 195,000.

New Hampshire, New England State, U.S.A.; bounded N. by Quebec, W. by Vermont, S. by Massachusetts, E. by Atlantic Ocean and Maine. Surface mountainous, except in S.E.; White Mts. in N. consist of several ranges—Presidential, with Mt. Washington (6,293 ft.); Franconia range; Carter-Moriah range. Principal rivers are Connecticut, Piscataqua, Merrimac, Androscoggin; numerous lakes with fine scenery. Climate healthy, with severe winters. Extensive forests of beech, oak, yellow birch, sugar-maple. Principal products are hay, corn, potatoes, oats, fruit (especially apples), tobacco, timber; manufactures cotton and woollen goods, boots and shoes, lumber, machinery, flour, paper; granite and mica are quarried. The principal towns are Manchester, Nashua, Concord (cap.). Area, 9,341 sq. m.; pop. 443,000.

New Haven, seaport, Connecticut, U.S.A., on New Haven Bay; one of finest cities in America; seat of Yale Univ.; chief manufacturing city of state, and has extensive trade; fire-arms, tools, clocks, carriages, paper; meat packing an important industry. Pop. 163,000.

Newhaven. (1) Seaport, Sussex, England, at mouth of R. Ouse; large import trade carried on with Fr. ports; packet station for Dieppe. Pop. 6,800. (2) Fishing vil., Scotland, on Firth of Forth; part of city of Edinburgh; large fish market.

New Hebrides, chain of islands, Pacific Ocean, c. 500 m. W. of Fiji,

largest being Espiritu Santo, Mallicolo, Erromango, Efate or Sandwich, Ambrym, Tanna, and Anietyum; mostly lofty and volcanic, with luxuriant vegetation; sago-palm, sugar-cane, arrowroot, coffee grown; sulphur, copper, nickel found; leading exports are coffee, copra, maize, bananas, and cotton. Jointly administered (since 1906) by Brit. and French High Commissioners; seat of government at Port Vila in Efate I.; inhabited by native Melanesians, British, and French. Area, c. 5,700 sq. m.; pop. c. 60,000.

New Ireland, formerly Neu-Mecklenburg, second largest island in Bismarck Archipelago, W. Pacific; mountainous; fertile soil; coconuts, bananas. Chief town, Kavieng. Area, 3,000 sq. m.

New Jersey, Atlantic State, U.S.A.; bounded n. by New York, w. by Pennsylvania, s. by Delaware Bay, and e. by Atlantic. Coast-line is about 120 m., fringed with sand-bars; numerous large inlets. Surface hilly in n. where Blue or Kittatinny Mts. in High Point attain a height of 1,805 ft.; s.e. of Blue Mts. is large plateau with average elevation c. 1,000 ft. Coastal region is marshy. Among rivers are Hudson, Delaware, Passaic, and Raritan, many navigable; in n. are numerous lakes situated amid fine scenery. Climate healthy, esp. in highlands, where there are many summer resorts. Extensive forests (chiefly pine) in s.; oak and chestnut in n. Chief agricultural products, maize, wheat, oats, hay, potatoes, fruit. New Jersey is an important manufacturing and commercial state; minerals, zinc, cement, and iron; main industries textiles, machinery, iron and steel, leather, petroleum refining, chemicals. Valuable fisheries. Chief towns, Newark, Jersey City, Paterson, Trenton (cap.), Camden, Elizabeth, Hoboken, Bayonne, and Passaic. Area, 8,224 sq. m.; pop. 3,156,000.

New London, tn., Connecticut, U.S.A., on R. Thames, 3 m. from Long I. Sound; good harbour; agricultural

machinery, hardware, silk thread, cotton and woollen goods; fruit canning; fishing; naval arsenal. Pop. 30,000.

Newlyn, seaport vil., Cornwall, England, on Mount's Bay; fishing is chief industry; formerly tin much worked and smelted. Pop. 3,900.

New mains, tn., Lanarkshire, Scotland, 2 m. N.E. of Wishaw; coalmines and ironworks. Pop. 4,000.

Newmarket. (1) Mkt. tn., Suffolk, England, 12 m. E. of Cambridge; noted for horse races held on Heath; Jockey Club has extensive premises here. Pop. 9,800. (2) Tn., North Island, New Zealand, 3 m. s. of Auckland, of which it forms a suburb large railway workshops. Pop. 3,000.

New Mexico, s.w. state, U.S.A.; bounded n. by Colorado, w. by Arizona, s. by Mexico and Texas, e. by Texas and Oklahoma. Region consists of high tablelands broken by lofty mountain ranges; highest peaks (some over 12,000 ft.) belong to main chain of Rocky Mt. system. Characteristic feature is flat-topped mountain or *Mesa*. In e. is vast extent of waste land known as Staked Plains or Llano Estacado. Most important rivers: Rio Grande, which crosses state from n. to s.; Canadian R. and Pecos in e. Climate is healthy. Rainfall insufficient for agriculture, valleys productive, and other regions rendered fertile by irrigation; chief crops are wheat, maize, oats; cotton, vegetables, and fruits also cultivated; leading industry stock raising. New Mexico is rich in minerals; gold, silver, copper, coal, lead, and zinc worked; marble and sandstone quarried; turquoises and other precious stones found; mineral springs numerous. Leading industries are flour and grist milling, manufacture of cars, lumber and timber products, and blankets. Chief towns are Santa Fé (cap.) and Albuquerque (with univ.). Area, 122,634 sq. m.; pop. 360,000.

New Milford. See NEYLAND.

New Mills, urban dist., Derbyshire, England, 8 m. S.E. of Stockport; has

calico-printing works, foundries, collieries. Pop. 8,600.

Newmilns and Greenholm, tn., Ayrshire, Scotland; on riv. Irvine; muslins, laces; ruins of old castle. Pop. 4,000.

New Orleans, port, Louisiana, U.S.A., on Mississippi R. Dykes or embankments (levees), wide enough to form promenades, have been constructed along river banks to prevent inundation. River lined with docks and piers; modern part of city wide and spacious; old French and Spanish quarters afford striking contrast; among prominent structures are city hall, custom house, cotton exchange, St. Louis Cathedral (1723), Cabildo (old Spanish city hall), and archiepiscopal palace (1730). One of chief cotton markets of world, with extensive export trade in cotton, tobacco, lumber, sugar, rice, grain, and hides; manufactures include molasses, rice, cotton goods, and machinery; one of largest sugar refineries in America. Pop. 456,000.

New Pitfallo, go, vil., n. Aberdeenshire, Scotland; has extensive granite quarries. Pop. 1,400.

Newport. (1) Seapt., Monmouthshire, England, on R. Usk; important iron and chemical manufactures, agricultural implements, pottery, glass; exports large quantities of coal and iron; has ruined castle (12th cent.) and fine old church; Roman remains found. Pop. 89,200. (2) Munic. bor., Isle of Wight, England; in neighbourhood are remains of Carisbrooke Castle, where Charles I. was imprisoned. Pop. 11,300. (3) Mkt. tn. and urb. dist., Shropshire, England, 11 m. w. of Stafford; ruins of Lilleshall Abbey; agricultural college; manufactures agricultural implements and machinery. Pop. 3,400. (4) Burgh, Fife, Scotland, on Firth of Tay; residential suburb of Dundee. Pop. 3,300. (5) Port, Rhode Island, U.S.A., on Narragansett Bay; excellent harbour, well protected by forts and torpedo station; naval station; fashionable wat.-pl.; fish-

ing is chief industry. Pop. 27,000. (6) City, Kentucky, U.S.A., on Ohio R., opposite Cincinnati; iron and steel goods. Pop. 30,000.

Newport News, port, Virginia, U.S.A.; fine harbour; large ship-building centre; exports coal, tobacco, and motor-cars. Pop. 34,000.

Newport Pagnell, mkt. tn., Bucks, England, at junction of rivs. Ouse and Ousel; brewery, carriage and motor-building works; parish church (14th cent.); Queen Anne's Hospital (13th cent.). Pop. 4,000.

Newquay, urb. dist., Cornwall, England, 11 m. n. of Truro; popular summer resort; pilchard fisheries. Pop. 6,000.

New River, artificial channel, England, conveying water from springs of Chadwell and Amwell, Hertfordshire, and from R. Lea to reservoirs at Hornsey and Stoke Newington, London.

New Rochelle (rô-shel'), city, New York, U.S.A.; residential suburb of New York; printing. Pop. 54,000.

New Ross, tn., river port, Wexford, I.F.S., on R. Barrow; tanning, brewing, salmon fishing; agricultural trade. Pop. 5,000.

Newry, mkt. tn., seaport, co. Down, N. Ireland, near head of Carlingford Lough; flax spinning, breweries, tanneries, and rope making; granite is quarried. Pop. 12,200.

New Siberian Islands, group of islands in Arctic Ocean, n. of Siberia, consisting of Koteln, Byelkovski, Thaddaeus, Novaya Sibir, and Lyakhov Islands; highly interesting fossil flora and fauna (mammoth, rhinoceros, etc.); climate severe; uninhabited.

New South Wales, oldest state of Australian Commonwealth; bounded n. by Queensland, w. by South Australia, s. by Victoria, e. by Pacific Ocean; coast-line from Cape Howe to Point Danger, c. 700 m., contains many excellent harbours. Traversed from n. to s. by Great Dividing Range, including New England and Liverpool ranges, Blue Mts., Australian Alps, Mt. Kosciuszko, highest

peak in Australia (7,328 ft.). W. part consists of extensive plains with fine pasture lands; E. of Dividing Range lies a narrow coastal plain. Chief rivers are Murray, Murrumbidgee, Darling, Lachlan. Climate healthy; northern coastal districts dry and subtropical; interior and western plains hotter and drier than coast. Chief industry is sheep rearing, particularly for wool; also large numbers of cattle and horses. Mining is next in importance; chief minerals, gold, silver, copper, tin, lead, and coal. Principal agricultural products, grain, potatoes, hay, tobacco, and dairy produce. There are valuable fisheries and timber. Manufacture is rapidly increasing. Chief towns, Sydney (cap.), Newcastle, Broken Hill, Auburn, and Bankstown. Contains Canberra, the Commonwealth cap., in enclave of Federal Territory. Area, 309,432 sq. m.; pop. 2,102,000.

Lord Howe Island, c. 400 m. E. of Port Macquarie, is a dependency of New South Wales.

Newton. (1) City, Massachusetts, U.S.A.; residential suburb of Boston; manufactures machinery, silk, worsted, and rubber products. Pop. 65,000. (2) Tn., Lanarkshire, Scotland, 5 m. S.E. of Glasgow; nail-making industry. Pop. 5,100.

Newton Abbot, mkt. tn., s. Devonshire, England, on Teign estuary; rly. jn. Pop. 15,000.

Newtongrange, vil., Midlothian, Scotland, 2½ m. S. of Dalkeith; collieries, brick and tile works. Pop. 4,800.

Newton Heath, tn., Lancashire, England; suburb of Manchester; cotton mills, chemical and dye works. Pop. 34,700.

Newton-in-Mak'erfield, urban dist., Lancashire, England, 15½ m. W. of Manchester; includes Newton-le-Willows and Earlestown; rly. jn.; collieries; paper, cotton, and sugar mills; glassworks, locomotive and engineering works. Pop. 20,200.

Newton Stew'art, mkt. tn., Wigtownshire, Scotland, on R. Cree, 50 m.

W.S.W. of Dumfries; woollen goods, agricultural implements. Pop. 1,800.

New'town, tn., Montgomeryshire, Wales, on R. Severn; flannel; birthplace of Robert Owen. Pop. 5,200.

Newtownards, seaport, co. Down, N. Ireland, on Strangford Lough; muslin embroidery; linens, hosiery; nurseries. Pop. 10,100.

New'town St. Bos'wells, vil., Roxburghshire, Scotland, 3½ m. S.E. of Melrose; important railway jn. (St. Boswells). Pop. 600.

New'town Stew'art, mkt. tn., co. Tyrone, N. Ireland, 10 m. N. by W. of Omagh; burned by James II. after siege of Londonderry. Pop. 1,900.

New Wash'ington, tn., Panay I., Philippine Islands; rice, sugar, cattle, and horses. Pop. 24,000.

New Waterford, tn., Nova Scotia, Canada, on Cape Breton I., 8 m. N.E. of Sydney. Pop. 7,500.

New Westminster, tn., former cap., Brit. Columbia, Canada, near mouth of Fraser R.; exports lumber, canned salmon, fish oil. Pop. 14,000.

New York. (1) N.E. state of U.S.A.; bounded N. by Quebec, N.W. and W. by Ontario, L. Ontario and L. Erie; S. by Pennsylvania, New Jersey, and Atlantic; E. by Connecticut, Massachusetts, and Vermont. Includes Long I. and Staten I. on Atlantic coast. Coast-line c. 275 m. on Lakes Erie and Ontario, with several good harbours; ocean seaboard is small but important, containing harbour of New York city. Surface mountainous in E.; Adirondack Mts. in N.E.; Catskill Mts. in S.E.; extensive tableland in central and W. regions; coastal districts level. Principal river is Hudson, which, with its tributary the Mohawk, is chief route to interior plains. Many fine falls and rapids, esp. Niagara. Climate healthy, with hot summers and severe winters. Immense forests in Adirondack, Catskill Mts.; much pasture and arable land in plateau regions. Principal products, hay, potatoes, maize, oats, wheat, dairy products, timber. Important industries are manufacturing

of clothing, machinery, printing and publishing, sugar and molasses refining, slaughtering and meat packing; flour, paper, petroleum refining, silk and silk goods, cement. Minerals include magnetic iron ore, natural gas, petroleum; salt, gypsum, marble, limestone are quarried; valuable fisheries (oysters), etc. Chief tns., New York, Buffalo, Rochester, Syracuse, Albany (cap.), Schenectady, Yonkers, Utica, Troy, Binghamton. Area, 49,204 sq. m.; pop. 11,162,000. (2) City, New York state, largest in U.S.A., and second largest in world; on Hudson R. Includes Manhattan I., Long I., Staten I. It is divided into five boroughs—Manhattan, Richmond, Brooklyn, Queens, and Bronx. Harbour, one of finest in world, consists of outer harbour or Lower Bay (area, c. 120 sq. m.); separated from Atlantic Ocean by Sandy Hook bar, and inner harbour or Upper Bay (14 sq. m.), connected with former by the Narrows, between Long I. and Staten I. Statue of Liberty stands in Upper Bay. Larger part of city laid out very regularly. Principal business thoroughfares are Broadway, Wall and New Streets; residential streets are Fifth Avenue, Madison Avenue, Park Row. A striking feature of the city are the 'skyscrapers,' such as the Woolworth building, 750 ft. high, with 40 floors. Several fine parks. Various divisions of city linked by bridges, ferries, tunnels, electric tramways, etc. The suspension bridges, George Washington (largest in world), Williamsburg, Brooklyn, and Manhattan, are noteworthy. New York is first seaport of the world, and greatest manufacturing centre of U.S.A.; its foreign trade is about half that of whole country. Chief industries are manufacturing of clothing, textiles, printing and publishing, machinery, iron and steel goods, scientific and musical instruments, sugar and molasses refining, packing and preserving of meat. Pop. 6,982,000.

New Zealand, British Dominion, S. Pacific Ocean; comprises three

islands, North, South, and Stewart. Coast-line is generally broken. Plains along E. coast; largest is Canterbury in South I. In North I. volcanic mountain ranges run throughout (highest peaks, Ruapehu, 9,175 ft.; Egmont, 8,260 ft.); drained by Rs. Waikato (from Lake Taupo), Thames, Waioira, North, Wanganui. South I. is traversed by Southern Alps and other ranges (highest peak, Mt. Cook, 12,350 ft.); drained by Rs. Clutha, Buller, Grey, and other streams. Stewart I. is mountainous; North I. subject to earthquakes and volcanic eruptions, and noted for its geysers and hot springs. Climate temperate and healthy, with moderate rainfall except on w. slopes of Southern Alps.

The flora and fauna are in general unlike those of the rest of the world. Native plants include New Zealand flax, kauri pine, and tree ferns. Mammals are almost entirely absent except those introduced by man. Native birds include several almost entirely wingless, such as the kiwi or apteryx. Colonization was begun in 1840, when Wellington was founded. The early colonists found the country already occupied by a native race called Maoris. Vast numbers of sheep and cattle raised. Horses and pigs are also bred, and wheat, oats, and other crops widely cultivated. Oranges, lemons, peaches, olives, and other fruits abound. Minerals include gold, coal, copper, silver, iron. Wool, frozen meat, and dairy produce exported; exports also include cereals, hides, kauri gum, fibre, tallow. Chief towns, Auckland, Wellington (cap.), Christchurch, Dunedin, Wanganui. Area, including Outlying Islands, 103,569 sq. m. (North I., 44,131 sq. m.; South I., 58,120 sq. m.; Stewart I., 662 sq. m.); pop. 1,474,000 (including 66,000 Maoris).

The Outlying Islands are Kermadec, Chatham, Auckland, Cook, and other S. Pacific islands. The Ross Dependency in Antarctica and the Union or Tokelau Is. are under the jurisdiction

of New Zealand, which also holds mandate over W. Samoa.

Neyland (*nā'land*), or NEW MILFORD, urb. dist., Pembrokeshire, Wales, on Milford Haven; calling place for Irish steamers. Pop. 2,700.

Niagara, riv., N. America; forms boundary between Ontario and New York; flows from L. Erie, and flows into L. Ontario (c. 35 m.). **Niagara Falls**, about 20 m. below L. Erie, are divided by Goat Island into two parts; American Fall, c. 1,400 ft. wide, falls 167 ft.; Canadian (Horse-shoe) Fall forms curve of 2,600 ft., and falls 153 ft.; below falls, river rushes through gorge for 7 m.; total descent from L. Erie to L. Ontario is 315 ft.; part of water-power utilized to develop electric energy.

Niagara Falls. (1) Tn., New York, U.S.A., on R. Niagara; R.C. univ.; manufacturing centre deriving electrical power from falls; flour, paper, aluminium, carborundum, calcium carbide, bleaching powder. Pop. 75,000. (2) Port, Ontario, on R. Niagara, Canada; has large electrical power plants; carborundum, clothing, wire, canned goods, silver ware. Pop. 15,000.

Nias (*nā-as'*), isl., Dutch E. Indies, 65 m. w. of Sumatra; surface mountainous and partly volcanic; chief products, coconuts, pepper, rice, sugar, tobacco. Area, c. 2,000 sq. m.; pop. c. 160,000.

Nicaragua (*nik-a-nā'wa*), republic, Central America; bounded n. by Honduras, e. by Caribbean Sea, s. by Costa Rica, w. by Pacific; Cordillera runs along s.w., 15 to 30 m. from coast; between mountains and sea is depression containing Lakes Managua and Nicaragua; to e. between base of hills and sea is extensive plain. Land is drained by Rs. Coco, Grande de Matagalpa, San Juan. Country subject to earthquakes (severe earthquake 1931, when Managua was destroyed). Climate varies with elevation; hot and damp near coast. Produces mahogany and other valuable timbers, coffee and bananas;

also cacao, sugar-cane, fruit, gold, silver; stock raising and dairying important. Railway mileage, 159. Inhabitants include Europeans (very few), Indians, half-breeds. An inter-oceanic canal has been proposed by way of San Juan R. and L. Nicaragua. U.S.A. purchased (1916) exclusive right to construct and operate such a canal. Chief tns., Managua (cap.), Leon, Granada, Masaya. Area, 51,660 sq. m.; pop. 638,000.

Nicastro (*nē-cās'trō*), tn., Calabria, s. Italy; bishop's see; ruins of a castle; wine and oil. Pop. 21,000.

Nice (*nēs*), chief tn., Alpes-Maritimes, France, on Mediterranean. Fashionable Riviera winter resort, with fine climate. Birthplace of Garibaldi; has cathedral, observatory, fort, and harbour; exports flowers, perfumes, fruits, olive oil, pottery, and carved olive-wood. Pop. 184,000.

Nicobar Islands. See ANDAMAN AND NICOBAR ISLANDS.

Nicosia (*nik-o-sē'a*). (1) (Greek *Leukosia*) Cap. of Cyprus; seat of Gr. archbishop; leather, textiles; fruits and wine. Pop. 18,000. (2) Tn., Catania, Sicily; a salt mine and sulphur springs. Pop. 14,000.

Niotheroy (*nik-tā-rō'ē*), tn., Brazil, S. America, 4 m. e. of city of Rio de Janeiro; manufactures textiles, soap, and tobacco. Pop. 86,000.

Nidaros, formerly TRONDHJEM, port, Norway, on Trondhjem Fjord; exports lumber, copper, wood pulp, fish; shipbuilding; cathedral (11th cent.) is place of coronation of kings of Norway; former cap. of Norway. Pop. 55,000.

Niemen (*nye'men*), (German *Memel*), riv., Europe; rises near Minsk (White Russia); flows through Poland and Lithuania, and falls by several mouths into Kurisches Haff. Length, 500 m. forms boundary between Memel Terr., Lithuania, and E. Prussia.

Nieuport, tn., on R. Yser, W. Flanders, Belgium; shipbuilding and fisheries. Nieuport Bains, 2 m. away, is a seaside resort. Pop. 3,000.

Nièvre (*nē-ā'vr*), central dep., France;

mountainous in *z.*; drained by R. Allier, Loire, Yonne; large forest area; sheep and horses raised; coal, iron and steel manufactures; china, white wine; state ironworks at Guérigny. Chief tn., Nevers. Area, 2,658 sq. m.; pop. 260,000.

Nigde (*nîg'de*), chief tn. of vilayet, Asia Minor, 80 m. N.W. of Adana; fine buildings of Seljuk period. Pop. 59,000.

Niger (*nî'jër*). (1) Large riv. of W. Africa; rises in plateau of Fouta Jalon in French Guinea; flows N.E. through French Sudan, turns S.E., passes through Nigeria, and enters Gulf of Guinea by numerous mouths, Rio Nun at Akassa being chief, though the Forcados is main channel of communication with interior. Swampy delta extends about 120 m. along coast, and covers an area of 14,000 sq. m. Most important tributary is R. Benue, or 'Mother of Waters.' Niger is known locally under various names (Joliba, Isa, Quorra, etc.). Total length, 2,600 m., of which over 1,050 are navigable; area of basin, c. 1,000,000 sq. m. (2) Colony, French W. Africa, between Nigeria and Italian Libya; Sahara desert in *n.*, forests and cattle pastures in *s.*; millets, manioc, dates, beans, ground-nuts; cap. Niamey, on R. Niger. Area, c. 405,000 sq. m.; pop. 1,450,000.

Nigeria (*nî-jër'i-a*), Brit. colony and protectorate, W. Africa; bounded on *n.* by French W. Africa, *e.* by Lake Chad and Cameroons, *s.* by Gulf of Guinea, and *w.* by Dahomey. Coast region flat and swampy, with hot and unhealthy climate, malaria being prevalent; *n.* fertile, with healthier climate; interior traversed by mts.; highest ranges, 6,000 to 7,000 ft.; immense valuable forests. Chief rivers are Niger, Benue, Sokoto, Kaduna. Protectorate is divided for administrative purposes into N. Provinces and S. Provinces. Brit. mandated terr. of Cameroons is administered by Nigeria. Agriculture (with cattle rearing in *n.*) is principal

occupation. Products are palm oil, kernels, timber, cotton, cocoa, livestock, hides and skins. Tin and coal are important minerals. Rivers and roads are chief means of communication, but railways (mileage in 1929 c. 1,900) are being extended. Chief tn. Lagos (cap. and chief port); inland native tns., Kano, Ilorin, and Kaduna; ports Brass, Bonny, Port Harcourt, and Calabar. Area, c. 335,700 sq. m.; pop. 18,966,000 (including c. 5,000 Europeans).

Niigata (*nî-ê-gô-tâ*), seaport, Honshu, Japan, on *w.* coast; harbour improved by dredging; lacquerware; coal and petroleum in neighbourhood. Pop. 109,000.

Niihau. See under HAWAIIAN ISLANDS.

Nijar (*nê-har'*), tn., S.E. Spain, 16 m. N.N.E. of Almería; iron ore, lead, and manganese mined; textiles and porcelain manufactured. Pop. 11,000.

Nijmegen, NYMWEGEN, or NIMEGUEN (*nim-â'gen*), city, Gelderland, Holland, on R. Waal; contains church of St. Stephen (1272), Renaissance town hall, and ruined Carolingian palace; tobacco, metal-work, leather, beer. Pop. 76,000.

Nijni-Novgorod (*nîzh'nê-nov'gô-rod*). (1) Prov., central Russia; watered by R. Volga and other rivs.; richly forested; produces timber, fruit, cereals; manufactures iron goods, leather; shipbuilding, sawmilling, and distilling are carried on. Area, 21,853 sq. m.; pop. 2,737,000. (2) Cap. of above; at junction of Oka and Volga rivs.; consists of Upper Town, with *Kremlin* or citadel, situated on hills; Lower Town, along banks of Oka and Volga; and Fair Town, between the two rivs. Owes its importance to traffic along the rivers and to fairs which attract merchants from all parts. Chief industries: flour-milling, distilling, manufacture of pottery and machinery, and shipbuilding. Pop. 181,000.

Nik'ko, tourist resort, Honshu, Japan, 90 m. N.W. of Tokyo; an important religious centre; many

Shinto and Buddhist shrines and temples.

Nikolaev (*ně-ko-lă'ăv*), seaport, Ukraine, U.S.S.R., at head of estuary of R. Bug; naval station; has Greek cathedral, observatory, naval arsenal; manufactures flour, iron goods, glass, tobacco; exports grain, timber, iron ore, linseed, and sugar. Pop. 101,000.

Nikolaevsk. See PUGACHEV.

Nikolaistad. See VAASA.

Nile (*nîl*), river of Africa; has its farthest source in head-streams of R. Kagera, which rises between 2° and 3° s., and enters L. Victoria. Flows n. to Gondokoro (5° n.), the usual limit of navigation, and about 10° n. is joined by the Bahr-el-Ghazal and the Sobat; from this point to Khartoum it is called the White Nile (Bahr-el-Abyad). Here joined by Blue Nile (Bahr-el-Azroq), and flows in long, narrow valley to Cairo, and thence through delta to Mediterranean Sea. Below Khartoum it receives only one trib., the Atbara (Black Nile), which drains N. Abyssinia. The Nile is second longest riv. in world, being c. 4,000 m. long, and but for two great interruptions, is navigable for its entire course. Sudd (floating vegetation) hinders navigation on Upper Nile. Basin is c. 1,100,000 sq. m. Between Wadi Haifa and Khartoum there are five cataracts. At Aswan a great reservoir and dam have been constructed, affording irrigation to over 650 sq. m. of land. A dam has also been constructed across the Blue Nile at Sennar for irrigation.

The Nile enters the Mediterranean Sea by two principal distributaries, the Rosetta and Damietta branches. Once every year the Nile overflows its banks, and deposits upon the land a black and very fertilizing mud, upon which all the crops in Egypt depend. About the end of April the rise is perceived at Khartoum, but it is not until towards end of June that its effects are felt at Cairo. The overflow reaches its maximum in Sept., remains practically stationary until end of Oct., after this slowly subsides. The Nile floods

depend on rainfall of Abyssinian highlands. Formerly cultivation could only be after annual floods, but with the aid of regulating dams at Asyut, near Cairo, and at Zifta and Esna, perennial irrigation is provided.

Nilgiri Hills or **NILGIRIS** (*ně'gi-rîs*), plateau, s. Deccan, India; highest point, Mt. Dodabetta, 8,760 ft.; coffee, tea, cinchona; mica, gold-bearing quartz. Area, 982 sq. m.; pop. 126,000.

Nimach (*ně-much'*), tn., Central India, 130 m. s. of Ajmer; British cantonment. Pop. 10,000.

Nîmes (*nîem*), chief tn., Gard, s. France; silk, cotton, shawls, hosiery, machinery, carpets, wine and brandy trade; has magnificent Roman remains; Maison Carrée, finest extant example of Greco-Roman architecture; huge amphitheatre, Tour Magne, Temple of Diana. Pop. 74,000.

Ning-po', walled tn., Chekiang, China; a treaty port; famous for wood-carving; exp. rice, cotton, tea, silk, beans, and wheat; fisheries; manufactures grass mats, lace, and hardware; many monasteries and temples. Pop. 212,000.

Niort (*nî-or'*), cap., Deux-Sèvres, w. France, on R. Sèvre-Niortaise, 35 m. n.e. of La Rochelle; market gardens; leather, gloves; beautiful Gothic church. Pop. 23,000.

Nipigon, lake, Ontario, Canada; discharges by Nipigon R. into Lake Superior; over 1,000 islands; length, 70 m.; breadth, 50 m.

Nîpiasing, lake, Ontario, Canada; discharges into Lake Huron by French R.; length, 50 m.; breadth, 20 m.

Nippon. See JAPAN.

Niris. See BAKHTIGAN.

Nish, tn., Yugoslavia, on the Nisava, trib. of R. Morava, 130 m. s.e. of Belgrade; important rly. jn.; rly. workshops; birthplace of Constantine the Great. Pop. 37,000.

Nith, riv., s. Scotland; rises in Ayrshire, flows n.e. to enter Dumfriesshire; flows s.e. to estuary on Solway Firth; in lower course divides Dumfriesshire from Kirkcudbrightshire;

navigable to Dumnfries. Length, 79 miles.

Nivelles (nè-vel'), tn., Belgium, 19 m. s. of Brussels; carriages, paper, railway workshops; 11th cent. church of St. Gertrude. Pop. 13,000.

Nizhne-Tagilsk (nyish'-ni-tag-il'sk'), tn., Ural Area, U.S.S.R.; on rly. from Perm to Sverdlovsk; steel and iron works; wooden boxes; copper, gold, platinum. Pop. 39,000.

Nome (nôm), tn., w. Alaska, N. America, on s. of Seward peninsula, Bering Strait; scene of gold rush 1900, when pop. was 12,500; it is now 850.

Nord (nor), dep., N.E. France, on Belgian frontier; chief rivers, Schelde, Scarpe, Oise, Sambre, Lys; soil fertile, producing flax, sugar-beet, tobacco, hops, cereals, and potatoes; extensive coal mines; manufactures iron, steel, sugar, glass, chemicals, machinery. Scene of much fighting during Great War. Cap. Lille. Area, 2,228 sq. m.; pop. 1,969,000.

Nor'den, tn., Lancashire, England; woollens, cottons; suburb of Rochdale. Pop. 4,300.

Norderney (nor'-der-nä), small isl., North Sea, off coast of E. Friesland, belongs to Hanover, Prussia; sea-bathing; length, 8 m.; breadth, 1½ m. Area, 8 sq. m.; pop. 5,000.

Nordhausen (nor'-hou-zen), tn., Saxony, Prussia, 32 m. E. of Göttingen; has R.C. cathedral; manufactures chiefly beer and spirits. Pop. 35,000.

Nord'kyn, Cape, promontory, Lapland, Norway; most northerly point of mainland of Europe.

Nördlingen (noord'-ling-en), tn., Bavaria, Germany, 50 m. s.w. of Nuremberg; manufactures carpets and soap. Scene of two battles during Thirty Years' War. Pop. 8,000.

Nore, Tye, sandbank, Thames estuary, England, marked by lightship.

Norfolk. (1) Mar. co., E. England; bounded on N. and E. by North Sea, S. by Suffolk, W. by Cambridge and Lincoln. Coast mostly low and flat, with few indentations; sea steadily encroaching; submerged forests at several places off coast. Inland are

undulating plains, valleys, and woods. In W. is Fen district. The Broads lie in E. Principal streams are Great and Little Ouse, Yare, Bure, Wensum, Waveney. Soil is fertile; wheat, barley, oats, turnips, mangolds; cattle rearing, fruit growing, malting, brewing, tanning, and brick making. Manufactures include boots, shoes, mustard, starch, and agricultural implements. Fisheries are of great importance, Yarmouth being headquarters. Chief towns are Norwich (co. tn.), Yarmouth, Lynn, Cromer, Wells, and Thetford. Area, 2,044 sq. m.; pop. 504,800. (2) Port, Virginia, U.S.A.; important railway and canal centre; naval station; fine public buildings; chief exports, coal, lumber, tobacco, flour, cotton, vegetables. Pop. 129,000.

Norfolk Broads. See BROADS.

Norfolk Island, isl., S. Pacific, midway between New Zealand and New Caledonia; fertile soil, producing oranges, figs, grapes, and other fruits; live-stock; terr. of Australian Commonwealth; formerly a penal settlement; colonized by Pitcairn islanders (1856); Australian holiday resort. Area, 13 sq. m.; pop. 900.

Norham (nor'am), par. and vil., Northumberland, England, on R. Tweed; castle immortalized in Scott's *Marmion*. Pop. (par.) 700.

Nor'mandy, old prov. of France, between Brittany and French Flanders; N. and W. coasts washed by English Channel; now comprises the five departments, Seine-Inférieure, Eure, Calvados, Manche, and Orne.

Nor'manton, tn., on R. Calder, Yorkshire, England, 3 m. N.E. of Wakefield; coal mines, iron and chemical works. Pop. 15,700.

Nor'ristown, tn., on R. Schuylkill, Pennsylvania, U.S.A.; a residential suburb of Philadelphia; cottons, woollens, oilcloths, carpets. Pop. 36,000.

Norrköping (nor'-chip-ing), seaport, Sweden, on R. Motala, 80 m. S.W. of Stockholm; cotton goods, sugar, paper, tobacco; shipbuilding. Pop. 61,000.

North Adams, city, on R. Hoosac, N.W. Massachusetts, U.S.A.; boots and shoes, machinery and textiles. Pop. 22,000.

Northalerton, mkt. tn., Yorkshire, England, 18 m. s. of Middlesbrough; near by was fought battle of the Standard (1138); agricultural produce; motor engineering. Pop. 4,800.

Northam, urb. dist., N. Devon, England, 14 m. N. of Bideford; rly. station for Westward Ho! Pop. 5,800.

North America. See AMERICA.

Northampton. (1) Co. tn., Northamptonshire, England, on R. Nene; of great historic interest; leather manufactures; also tanning, brewing, paper making, iron founding, bricks, tiles. Pop. 92,300. (2) Tn., Massachusetts, U.S.A., 16 m. N. of Springfield; manufactures paper, silks, cottons, woollens. Pop. 22,000.

Northamptonshire, midland co., England; bounded by Lincoln, Rutland, Leicester, Warwick, Oxford, Buckingham, Bedford, Huntingdon, and Cambridge. Surface undulating; some parts richly wooded and well cultivated. N.E. forms part of Fen district. For administrative purposes the Soke of Peterborough in the N.E. ranks as separate county. Chief rivs., Nen, Welland, Avon, Cherwell, Leam, and Ouse. Wheat and barley are principal crops; stock raising. Iron is found; main industry, manufacture of boots and shoes; others are brewing, bookbinding, brush, paper, and lace making. Several interesting churches and remains of several castles, including those of Fotheringhay and Barnwell. Chief tns. are Northampton (co. tn.), Peterborough, Kettering, and Wellingborough Area, 998 sq. m.; pop. 361,300.

North Australia. See NORTHERN TERRITORY.

North Battleford, tn., Saskatchewan, Canada, on N. Saskatchewan riv., opposite Battleford; centre of agriculture. Pop. 5,000.

North Bay, city, Ontario, Canada, on N.E. shore of L. Nipissing; rly. jn. Pop. 15,500.

North Berwick (*ber'ik*), royal burgh and wat.-pl., Haddingtonshire, Scotland, on Firth of Forth; well-known golf links; near are North Berwick Law (612 ft.), Tantallon Castle, and Bass Rock. Pop. 3,500.

North Bierley. See BIERLEY, NORTH.

North Bromsgrove. See BROMSGROVE.

North Cape, promontory, Norway, on Magerö I.; generally accepted as most northerly point of Europe, though Knivskjærøde I., to the W., reaches about 1,000 ft. farther N.

North Carolina, South Atlantic State of U.S.A., bounded N. by Virginia, W. by Tennessee, S. and S.W. by S. Carolina and Georgia, E. and S.E. by Atlantic. Coast is fringed with sand reefs with three outstanding capes—Hatteras, Fear, and Lookout. Surface is mountainous in W. and S.E.; Great Smoky Mts., Black Mts., Bald Mts., Blue Ridge, etc.; highest peak Black Dome or Mt. Mitchell (6,711 ft.). Coastal plain region is level and swampy; piedmont plateau in centre is undulating. Chief rivers are: Broad, Cape Fear, Roanoke, Neuse, Chowan, Tar, Yadkin, Pamlico, Hiawassee, Catawba (many navigable); shallow lakes and swamps in coastal districts. Climate of mountain region is exceptionally fine, central part healthy; fever near swamps in coastal region. Extensive forests, esp. pine, in E.; trees include elm, cypress, cedar, oak, birch, beech, hemlock. Agriculture is the main occupation; principal prod., cereals, cotton, tobacco, cotton-seed oil, potatoes, timber; manufactures of cotton, furniture, flour, lumber; minerals unimportant; valuable fisheries (shad, oyster, etc.). Principal towns, Raleigh (cap.), Wilmington (principal port), Charlotte, Asheville, Durham, Winston-Salem. Area, 52,426 sq. m.; pop. 2,560,000 (including c. 760,000 Negroes).

North Caucasian Area, prov., Russia, N. of Caucasus Mts.; plain except in S.; wheat and other cereals; sunflower seeds; grapes, tobacco, live-

stock. Chief export, naphtha. Largest tn., Rostov-on-Don. Area, 115,000 sq. m.; pop. 8,325,000.

North Dakota, N. Central State, U.S.A., bounded on n. by Canada, e. by Minnesota, s. by S. Dakota, w. by Montana; surface mainly plateau, undulating plain, and grassy prairie; no trees unless along river banks, round shores of lakes, and in sheltered spots; chief rivers, Red R. of the North, which forms e. boundary, and its tribs.; Missouri and tribs.; in n.e. is sheet of salt water, Devil's Lake. High plateau called Coteau du Missouri extends from n.w. to s.e. Climate extreme but healthy; rainfall, coming in spring and summer, is of maximum benefit for agriculture, which is the chief industry. Especially in valley of Red R. soil is rich, fertile, and highly cultivated, principal crops being wheat, barley, rye, flax, hay, potatoes, and maize; ranching in w. Manufactures include flour and grist milling. Principal towns are Bismarck (cap.), Fargo, Grand Forks. Area, 70,837 sq. m.; pop. 647,000 (including 10,000 Indians).

North Darley. See DARLEY.

Northenden, or **NORTHEN**, par. and vil., Cheshire, England, on R. Mersey, 4½ m. by rail w. of Stockport; residential area for Manchester. Pop. (par.) 3,500.

Northern Ireland. See IRELAND.

Northern Territory, terr. of Commonwealth of Australia; bounded w. by W. Australia, s. by S. Australia, e. by Queensland, and n. by Arafura Sea; divided into N. Australia (cap. Darwin) and Central Australia (cap. Alice Springs), for administrative purposes. N. Australia consists of rolling country, with tableland of Arnhem Land in n.; Central Australia is similar in structure, with plateau in centre. Rising from this plateau are Macdonnell Mts. Plateau region contains much excellent pasture, but s. mainly desert. Climate tropical, in n. equable and in s. extreme. Stock raising and mining are chief occupations. Chief minerals, gold, tin, silver,

lead, and mica. Railway runs s. from Darwin to Ernangalan, and n. from Oodnadatta in S. Australia to Alice Springs. Darwin is chief port. Area, 523,620 sq. m.; pop. c. 4,000.

Northfleet, suburb of Gravesend, Kent, England; paper mills, chemical works, shipbuilding, bricks, Portland cement. Pop. 16,400.

North Foreland. See FORELAND, NORTH AND SOUTH.

North Holland, prov. of Holland, between North Sea and Zuider Zee; it includes the islands of Texel, Vlieland, Terschelling, Marken, Wieringen, and Urk; cattle rearing, cheese making, flower bulbs, potatoes; fishing, shipping, shipbuilding. Chief towns, Amsterdam and Haarlem. Area, 1,066 sq. m.; pop. 1,463,000.

North Island. See NEW ZEALAND.

North Sea, shallow sea, part of Atlantic between Great Britain and Continent of Europe; greatest depth off Norwegian coast (440 fathoms); most of area less than 100 fathoms; bed crossed by large banks (Dogger, Jutland, etc.); communicates with Baltic through Skagerrak and Kattegat; with English Channel through Strait of Dover; few islands except near coasts of surrounding countries; extensive fisheries; length, 600 m.; breadth, 400 m.; area, c. 200,000 sq. m.

North Shields, seapt., Northumberland, England, on R. Tyne; iron-works; shipbuilding; fish market; incorporated with Tynemouth.

North Tonawanda, city, on Niagara R., New York state, U.S.A., 14 m. n. of Buffalo; lumber mills; iron and steel industries. Pop. 15,000.

Northumberland, northernmost co., England, bounded on n. by Scotland, w. by Cumberland, s. by Durham, and e. by North Sea. Shores generally low; off coast lie Holy Isle, Farne Islands, and Coquet Island. Inland mostly rugged and broken, with undulating hills and moors, rising to grass-covered Cheviot Hills (highest point Cheviot, 2,676 ft.). Well watered by rivs. Tweed, Till, Aln,

Coquet, Wansbeck, Blyth, and Tyne; valleys fertile and well wooded. Greatest sheep-rearing county in England; cattle also raised (famous herd of wild white cattle maintained at Chillingham); chief crops, barley and oats; important coast and river fisheries; county of great industrial importance, coal being chief product. R. Tyne is centre of manufactures, and has enormous shipping trade, also shipbuilding, ironworks, alkali works, manufacture of machines, tools, glass, and pottery; in other parts of county are brick and tile works, potteries, and cloth mills. Chief tns., Newcastle, Tynemouth, Wallsend, Blyth, Berwick-on-Tweed, and Morpeth. Area, 2,018 sq. m.; pop. 756,700.

North Walsham, mkt. tn., Norfolk, England, 16 m. N. of Norwich; agricultural implements. Pop. 4,100.

North-West Frontier Province, prov., India, originally part of Punjab prov.; formed in 1901 for protection of India against invasion. About one-third of territory is British. Mostly mountainous, Hindu Kush forming N. boundary; highest summit is Tirach Mir (25,426 ft.); climatic conditions extremely diversified. Principal rivers are Indus, Kabul, Kurram, and Kunhar. River valleys and dist. of Peshawar are only fertile and cultivated parts. Leading occupation agriculture. Cap. Peshawar. Area, 38,665 sq. m.; pop. (mostly Pathans) c. 3,000,000.

Northwest Territories, unorganized area, N. Canada; lies N. of 60° N. lat. and E. of Yukon Terr.; divided into provisional dists. of Mackenzie, Keewatin, and Franklin; largely unexplored and uninhabited; forests and furs. Area, 1,309,682 sq. m.; pop. 8,000.

Northwich, mkt. tn., Cheshire, England, on R. Weaver; brine deposits, rock-salt mines, chemicals, brewing, tanning, brick making. Suffers from subsidence. Pop. 18,700.

Norton, urb. dist., E. Riding, Yorks, England, on R. Derwent, opposite

Malton; breeding and training of racehorses. Pop. 3,900.

Norton Canes, or **Norton-under-Cannock**, par. and vil., Staffordshire, England, 5½ m. N. of Walsall; collieries. Pop. (par.) 5,800.

Norton-in-the-Moors, par. and vil., Staffordshire, England, 2 m. N.E. of Burslem; collieries, ironworks. Pop. (par.) 5,900.

Norwalk, city, Connecticut, U.S.A., on Long I. Sound; important oyster fisheries; iron foundries; manufactures hats and clothing. Pop. 36,000.

Norway, kingdom, N. Europe, forming W. portion of Scandinavia; bounded N. by Arctic Ocean, E. by Finland and Sweden, S. by Skagerrak and W. by Atlantic and Arctic Oceans; extreme length, c. 1,150 m.; width varies from 20 to 260 m. Coast protected by fringe of islands (the Skjærgård). Everywhere indented by long, narrow, winding fjords (varying in depth from 220 to 660 fathoms), which furnish many convenient harbours. The islands (largest group the Lofotens) contain about 7 per cent. of the total area. Except in S. and S.E., coast rises steeply from sea; Kjolen Mts. in N. (mean height from 4,000 to 6,000 ft.), Dovrefjeld Mts. in S. (mean height from 2,000 to 4,000 ft.); highest peak c. 8,200 ft. Numerous lakes, and short, rapid rivers, the longest being R. Glommen and R. Tana Elf. Climate modified by Gulf Stream Drift; cold is severe in interior; fjords allow damp winds of Atlantic to reach plateau, and snowfall there is greater than it would otherwise be. Temp. ranges from a winter mean of about 2° in the extreme N. to a summer mean of 63° in the S. Coast always ice-free; N. part is 'land of the midnight sun.' Only 3 per cent. of country fit for cultivation. Principal crops, oats, barley, wheat, rye, and potatoes. Timber and fisheries constitute the wealth of Norway. Of the forest trees nearly three-fourths are pines. Chief fish, cod, ling, and herring; whales, walrus, seals, and sharks are taken in N. Cod-liver oil

exported in large quantities. The minerals—chiefly copper, silver, pyrites, felspar—are increasing in value. Norway is one of the great carrying countries of Europe—the mercantile marine has a net tonnage of 1,829,794. Principal exports are animal produce, timber and wooden goods, minerals and metals, skins, etc. Cap. Oslo; other tns. are Bergen, Nidaros, Stavanger, and Drammen. Area, c. 124,964 sq. m.; pop. 2,650,000.

Norwich (*nor'ich*). (1) Co. tn., Norfolk, England, on Wensum R.; fine Norman cathedral, founded in 1096; castle has Norman keep, now used as museum. Oldest town library in England; great cattle market; chief industries, engineering works, breweries, tanneries, and brickworks; manufactures include chemicals, starch, mustard, silk fabrics, vinegar. Pop. 126,200. (2) City, Connecticut, U.S.A., on Thames R., 17 m. from its mouth, at head of navigation. Manufactures machinery, firearms, textiles, cutlery. Pop. 22,000.

Norwood. (1) Suburb of London, Surrey, England, 5½ m. s. of St. Paul's; residential. Pop. 56,000. (2) City, Ohio, U.S.A., 7 m. N.E. of Cincinnati; pianos, furniture, electrical and railway machinery; printing. Pop. 33,000. (3) Town, Massachusetts, U.S.A., 14 m. S.W. of Boston; printing and publishing. Pop. 13,000.

Not'o, tn., Syracuse, E. Sicily; trade in oil, wine, almonds. Pop. 32,000.

Nottingham, co. tn., Nottinghamshire, England, on R. Trent; well-built town, with large market-place; most notable buildings, St. Mary's and St. Peter's churches, R.C. cathedral, Univ. Coll., town hall, and exchange; castle now art museum; manufactures hosiery, lace, cotton, wool, bicycles, machinery, and chemicals; brassfounding, tanning, and brewing. Nottingham played a prominent part in Civil War. Pop. 268,800.

Nottinghamshire, or **Notts**, midland co., England, in R. Trent basin; surface level along R. Trent, elsewhere undulating, rising to c. 600 ft.;

contains Sherwood Forest, traditionally associated with Robin Hood (region now occupied by palatial residences, and locally known as 'The Dukeries'). Nearly half the area is arable; chief crops, wheat, oats, and barley; cattle reared; cheese-making important. County produces coal, gypsum, limestone; manufactures lace, hosiery. Co. tn., Nottingham. Area, 843 sq. m.; pop. 712,700.

Novā'ra, tn., Piedmont, Italy, 28 m. W. of Milan; cathedral dating in part from 5th cent.; textiles. Pop. 56,000.

No'va Sco'tia, Maritime Prov., Canada; most easterly of Dominion; connected with New Brunswick by isthmus of Chignecto, at head of Bay of Fundy; consists of Nova Scotia proper and Cape Breton Island, separated by Strait of Canso. Numerous harbours; coasts subject to fogs; many rivers and lakes. Surface is hilly and soil in lower parts fertile. Cereals, apples, pears, plums, and potatoes grow well, and there is excellent pasturage; extensive coal mines in N.; iron smelted; gypsum, gold, salt; fisheries are valuable and forests are important; timber, fruit, agricultural produce exported. Facilities for transport excellent. Chief towns, Halifax (cap.), Sydney, Glace Bay, Dartmouth, Amherst, and New Glasgow. Area, 21,428 sq. m.; pop. 524,000.

Novaya Zemlya (*no'vi-a zím'li-a*), two Russian islands in Arctic Ocean; divided by the narrow channel Matochkin Šnar, and separated from Vaigach I. by Kara Strait; surface mountainous; coast-line broken by fjords; furs of arctic fox and polar bear; whale, walrus, and seal fisheries. Length, c. 600 m.; greatest breadth, c. 90 m.; area, c. 30,000 sq. m.

Novgorod. (1) Prov., Russia, is drained by Upper R. Volga; crossed by several canals; mountainous in S.; fishing, shipbuilding, lumbering; glass, matches. Area, 19,583 sq. m.; pop. 1,045,000. (2) Cap. of above, on

Volkhov R., near Lake Ilmen; saw-mills; manufactures beer, spirits, boots and shoes, and bricks. Pop. 31,000.

No'vi Sad, formerly NEUBATZ, tn., Yugoslavia, 50 m. N.W. of Belgrade; pottery and cotton goods. Pop. 51,000.

Nov'ocherkassk, tn., N. Caucasian Area, Russia, on R. Don; cereals, wine, timber, bricks. Pop. 56,000.

Nov'omoskovsk, town, Ukraine, U.S.S.R., 16 m. N.E. of Dnepropetrovsk; brick making; trades in cattle, horses, tallow, skins. Pop. 11,000.

Novo-Radomsk. See RADOMSKO.

Nov'orossiysk, seapt., N. Caucasian Area, Russia, on Black Sea; exports cement, naphtha, and tobacco. Pop. 66,000.

Nov'o Sibirsk', cap. of Siberian Area, U.S.S.R., on R. Ob; trade in grain, flour, and agricultural machinery. Pop. 121,000.

Nowawes (nô'vâ-yes), tn., Brandenburg, Germany, 2 m. E. of Potsdam; jute and silk. Pop. 27,000.

Nowong'. (1) Dist., Assam, India, in R. Brahmaputra valley; rice, tea. Area, 3,699 sq. m.; pop. 398,000. (2) Cantonment, Bundelkhand, Central India, 115 m. S.E. of Gwalior; trade connected with supplies for troops. Pop. 7,000.

Nowy Sacz (no'vi sonch), tn., Poland, 45 m. S.E. of Cracow; old castle; railway repair shops. Pop. 26,000.

Noyon (nô-yon), anc. tn., Oise, France, on R. Oise, 67 m. N.E.E. of Paris; agricultural produce; iron foundries. Pop. 6,000.

Nu'bia, region N.E. Africa, stretching from Red Sea to R. Nile, and S. from Egypt to about Khartoum, but has no definite limits. In early times known as Ethiopia. Greater part of surface consists of sandy deserts and steppes; productive districts lie mostly in valley of R. Nile. Inhabitants are Hamitic peoples and Arabs.

Nuble (noo'blâ), inland prov., Chile, S. America, bordering Argentine Republic; extends up Andean slopes;

plain produces wheat, timber; stock raising. Cap. Chillan. Area, 6,098 sq. m.; pop. 229,000.

Nue'va San Salva'dor, tn., Salvador, Central America; two colleges; port La Libertad. Pop. 28,000.

Nuevo Leon (noo-d'vo lâ'on), state, S.E. Mexico, on slopes of Sierra Madre Oriental; sugar, agriculture, cattle raising; some mining. Cap. Monterrey. Area, 25,032 sq. m.; pop. 336,000.

Nukha (noo'ha), town, Azerbaijan, Transcaucasia, U.S.S.R.; silk. Pop. 23,000.

Numea. See NEW CALEDONIA.

Nunes'ton, mkt. tn., N.E. Warwickshire, England, on R. Anker; ribbons, cotton, worsted and elastic goods, hats, bricks, tiles; ironworks. Pop. 46,300.

Nürn'berg, or NUREMBERG, city, Bavaria, Germany, on R. Regnitz; mediaeval town with turreted walls, moat, gateways, gabled houses. Manufactures toys, carved wood and ivory, machinery, motor-cars, chemicals, lead pencils, paints; trading centre and large hop market. Pop. 392,000.

Nuwara Eliya (nû-râ'ya), hill station, Ceylon, 25 m. S.E. of Kandy; alt. 6,200 ft.; sanatorium.

Nyasa (ne-as'a), LAKE, S.E. Africa, occupies S. end of great African rift valley; numerous streams flow into L. Nyasa which drains by Shire R. into R. Zambezi; first explored by Livingstone (1859); navigated by steamers and sailing vessels. Length, 350 m.; breadth, 40 m.; area, c. 11,000 sq. m.

Nyasaland, British Protectorate, Africa, on W. and S. shore of L. Nyasa. Surface mostly lofty plateau (over 3,000 ft.). Exports tobacco, cotton, tea, coffee. Chief tns., Zomba (cap.), Blantyre, and Port Herald. Area, 37,890 sq. m.; pop. 1,307,000.

Nyeshin (nê-es'hin'), tn., Ukraine, U.S.S.R., 75 m. N.E. of Kiev; tobacco grown and manufactured. Pop. c. 50,000.

Nyiregyhaza (nyê'rej-hâ-zo), tn., N.E. Hungary, 17 m. S.E. of Tokay; extensive vineyards; soda, and agricultural machinery. Pop. 47,000.

O

Oad'by, urb. dist., Leicestershire, England, $3\frac{1}{2}$ m. s.e. of Leicester; boots and shoes. Pop. 4,700.

Oa'hu. See under HAWAIIAN ISLANDS.

Oajaca. See OAXACA.

Oak'engates, urb. dist., Shropshire, England, 13 m. e. of Shrewsbury; coal and iron industries. Pop. 11,200.

Oak'ham, co. tn., Rutland, England; remains of anc. castle; mkt. tn.; trade in cattle. Pop. 3,200.

Oak'land, port, California, U.S.A., on San Francisco Bay; motor vehicles; shipbuilding; electrical machinery; canneries; saw mills. Pop. 284,000.

Oak Park, tn., Illinois, U.S.A., 9 m. w. of Chicago, of which it is a residential suburb. Pop. 64,000.

Oak'worth, urb. dist., W. Riding, Yorks, England, 3 m. s.w. of Keighley; cotton and worsted goods. Pop. 4,000.

Oamaru (*ô-âm-â-roo'*), port, South Island, New Zealand, 78 m. n. of Dunedin; fine harbour; exports wool and frozen meat; seaside resort. Pop. 7,500.

Oaxaca (*wâ-hâ'ka*), or OAJACA. (1) State, s. Mexico; mountainous and well-watered; produces cereals, rubber, coffee, sugar, cotton, tobacco, indigo, dyewoods, cochineal. Area, 35,689 sq. m.; pop. 976,000. (2) Cap. of above; alt. 5,085 ft.; breweries, sugar mills, fibre factories. Pop. 28,000.

Ob, or OBI (*ôp*), riv., w. Siberia, Asia; rises in Altai Mts. and flows n.w., reaching Arctic Ocean through Gulf of Ob; frozen Nov. to June; with its tribs. (Irtysh, Tobol, Tavda, Tura) it provides over 15,000 m. of navigable waterways. Length, 2,500 miles.

O'ban, tn., Argyllshire, Scotland, on Firth of Lorne; summer resort and yachting centre; fish market and port for trawlers. Pop. 5,800.

O Bece. See STARI BECEJ.

O'beram'mergau (*-gom*), vil., Bavaria, Germany, 40 m. s.w. of Munich; wood and ivory carving. Passion Play performed here every ten years since passing of plague (1634); last representation, 1930. Pop. 1,600.

Oberhausen (*ô-ber-hou'zen*), town, Rhine prov., Prussia, 6 m. w. of Essen; ironworks, coal mining; glass, soap, porcelain, chemical products. Pop. 105,000.

O'berland. See BRENESE OBERLAND.

Oberschönseide (*ô-bër-shoon-ê-vî-dâ*), tn., Brandenburg, Prussia; supplies Berlin with electric power. Pop. 21,000.

Océan'ia comprises islands in Pacific Ocean; divided into various groups—viz., Melanesia (with Australasia), Polynesia, and Micronesia.

Ochil Hills (*ô'hîl*), hill range, Scotland, in cos. of Clackmannan, Kinross, Fife, and Perth; of volcanic origin; highest point Benleuch (2,363 ft.).

Ochrida (*ok'rê-dâ*), tn., s.w. Serbia, Yugoslavia, on L. Ochrida; numerous mosques; trade in hides. Pop. 10,000. Lake is 18 m. long, with extreme breadth of 8 m.

Od'da, tourist centre, Norway; at head of branch of Hardanger Fiord; amid beautiful scenery; carbide of calcium and cyanamide.

Ödenburg. See SOPRON.

Odenkirchen (*ô'den-kîrch-en*), tn., Rhineland, Prussia, 21 m. s.w. of Düsseldorf; cottons, silks, leather. Pop. 20,000.

Odense (*ô'den-vâ*), city, isl. of Fünen, Denmark; tanneries, breweries, cotton factories; exports butter, cheese, bacon, hides; birthplace of Hans Andersen. Pop. 52,500.

O'der, riv., Germany; rises in Sudetes Mts.; flows s.w. through Germany and enters Baltic by three arms; chief tribs., Bartsch, Neisse, Warthe; connected with Rs. Havel, Spree, and Vistula by canals; princi-

pal tns., Breslau, Stettin, Frankfurt; length, 560 m.; navigable to Ratibor.

Odes'sa, tn. and port, Ukraine, U.S.S.R.; on bay at n.w. extremity of Black Sea; large artificial harbour; freezes for a few days only; tn. undermined by catacombs, which are inhabited by casual dock labourers. Chief exports, flour, wheat, barley, rye, maize, oats, oilcake, sugar, pease, beans, alcohol, caviare, fish, and wood. Pop. 421,000.

Odiham (*ô'dē-am*), mkt. tn., Hants, England, 7½ m. E. of Basingstoke; formerly a residence of kings of Wessex. Town declined when rlys. passed it by, but is prospering again with motor traffic. Pop. 2,700.

Oels (*oôls*), tn., Silesia, Prussia, 20 m. N.E. by rail of Breslau; agricultural implements, carriages, bells, shoes; trade in flax and cereals. Pop. 14,500.

Oesel, or **OSEL**. See SAARE MAA.

Offaly County, formerly KING'S CO., inland co., Leinster, I.F.S.; surface generally level, with Bog of Allen in centre; Slieve Bloom Mts. in S.; drained by rivs. Shannon, Brosna, Barrow, Boyne; crossed by Grand Canal; cereals, dairy farming, livestock. Co. tn., Tullamore. Area, 772 sq. m.; pop. 52,600.

Offenbach, tn., Hesse, Germany, on R. Main; great industrial centre; machinery, sewing machines, aniline and chemical products, leather goods, soap, varnish, perfumery, printing materials. Pop. 80,000.

Offenburg, tn., Baden, Germany, 27 m. S.W. of Baden; textiles, glass, cement, agricultural machinery, malt, tobacco. Pop. 17,000.

Ogasawara Jima. See BONIN ISLANDS.

Og'den, city, Utah, U.S.A.; 35 m. N. of Salt Lake City; beet sugar, flour milling, canned goods, oil refining. Pop. 40,000.

Ogdensburg, city and port, New York State, U.S.A., on R. St. Lawrence; lumber manufactures; silk, flour, brassware. Pop. 15,000.

Og'more and Garw (*gar'oo*), urb. dist.,

Glamorganshire, S. Wales, 7 m. N. of Bridgend; coal mining. Pop. 30,200.

Og'owé, or **OGOWAL** riv., Gabon, French Equatorial Africa; rises in Crystal Hill and enters Atlantic by delta; falls and rapids render main channel unnavigable; length, c. 750 m.

Oh'io. (1) Riv., U.S.A., trib. of Mississippi; formed by junction of Monongahela and Allegheny rivs. at Pittsburgh; separates states of Ohio, Indiana, and Illinois from W. Virginia and Kentucky; chief tribs., Muskingum, Scioto, Wabash, Kanawha, Kentucky, Green, Cumberland, and Tennessee; most important tns. on banks, Pittsburgh, Cincinnati, Louisville, and Evansville; a great highway of commerce; navigable from Cairo to Pittsburgh; subject to floods; length, 965 m. (2) Inland state, U.S.A.; bounded on N. by Michigan and Lake Erie, E. by Pennsylvania and W. Virginia, S. by Kentucky, and W. by Indiana; surface a vast undulating high plain (average elevation, c. 850 ft.); drained by R. Ohio and tribs.; chief crops are maize, wheat, oats, hay; horses and cattle are raised; dairy farming important; minerals include coal, petroleum, and natural gas; industries include iron and steel working; manufacture of carriages and wagons; boots and shoes; clothing; lumber and timber working; rubber goods; flour and grist working; and slaughtering; Portland cement manufactured. Most important cities are Cleveland, Cincinnati, Toledo, Columbus (cap.), Akron, Dayton, Youngstown. Area, 41,049 sq. m.; pop. 5,760,000.

Oh'ligs, tn., Rhine Prov., Prussia, 17 m. N. of Cologne; cutlery; flour mills. Pop. 30,000.

Oil City, city, N.W. Pennsylvania, U.S.A., at junction of Oil Creek and Allegheny R.; oil, machinery for oil wells. Pop. 21,500.

Oirat, autonomous area, U.S.S.R.; bounded on N. by Siberian Area, S. by Kazak Rep., E. by Mongolia; traversed by Altai Mts.; drained by

upper Ob R.; forests; fur-bearing animals. Cap. Ulala. Area, c. 36,000 sq. m.; pop. c. 100,000.

Oise (*uiz*). (1) Riv., France; trib. of R. Seine; rises in Belgium; canalized; navigable to Chauny; length, 186 m. (2) Dep., N. France; undulating surface with fine forests; chief rivs., Oise, Aisne, and Lérain; principal products, cereals, flax, vegetables, beetroot, fruits; manufactures iron, textiles, leather, lace, chemicals, cider, sugar. Cap. Beauvais. Area, 2,272 sq. m.; pop. 406,000.

O'ka, riv., central Russia. Europe, r. bk. trib. of R. Volga; navigable for barges from Orel, below which river winds to R. Volga at Nijni-Novgorod; connected by canal with R. Don; basin rich and fertile. Length, c. 950 m.

Okayama, city, Honshu, Japan, 90 m. by rail W. of Kobe; old castle and superb gardens; orphanage. Pop. 124,500.

Okehampton (*ô-hâm'tun*), town, Devonshire, England; 20 m. W. of Exeter; remains of Roman road; large markets for cattle and farm produce. Pop. 3,400.

Okhotsk (*ô-hot'sk*), SEA OF, arm of N. Pacific Ocean, with Kamchatka on E., isl. of Sakhalin and Siberia on W.; almost enclosed by Kuril Islands; icebound from Nov. to April; storms and fogs common.

Oklahoma, S. Central State, U.S.A., bounded N. by Colorado and Kansas, E. by Missouri and Arkansas, S. by Texas, W. by Texas and New Mexico; surface chiefly prairies and rolling plains rising in N.W. to elevated tableland, which forms part of Great Plains; Ozark Mts. in E. and Chautauqua Mts. in W. are principal elevations; most important riv. is Arkansas; Red R. forms S. boundary. Plains are treeless; valleys and certain upland dists. fertile and well cultivated; chief crops are maize, wheat, and oats; vegetables, fruits, and cotton also produced; stock raising important in W. Chief state for production of petroleum, natural gas, and zinc;

coal and lead also worked; other industries unimportant, except flour and grist milling and cotton-seed oil. Chief tns., Oklahoma City (cap.), Tulsa, and Muskogee. Area, 70,057 sq. m.; pop. 2,025,000.

Oklahoma City, cap. of Oklahoma, U.S.A.; cotton industries; flour, lumber, foundry and machine-shop products; univ. Pop. 185,000.

Okmulgee, city, Oklahoma, U.S.A.; 80 m. E. of Oklahoma City; centre of great petroleum dist.; coal mining; glass. Pop. 17,500.

Öland (*oo'land*), Swedish isl. in Baltic Sea; interior barren, coast borders fertile; cereals, cattle rearing, cement; tn. Borgholm (pop. c. 10,000). Area, 519 sq. m.

Oldbury, urb. dist., Worcestershire, England, 5 m. N.W. of Birmingham; iron and steel goods, boilers, rly. carriages, chemicals, lighthouse lenses. Pop. 35,900.

Oldenburg. (1) Rep., Germany; composed of (a) prov. of Oldenburg, bounded N. by North Sea, W., S., and E. by Hanover; (b) prov. of Lübeck, on Baltic Sea; (c) prov. of Birkenfeld, between Moselle and Rhine rivs. Surface flat; coast dist. marshy, with rich agricultural and pasture land; inland chiefly moorland; principal riv., Weser; several lakes. Industries include brick making, brewing, gem cutting (agates), fisheries; extensive agriculture and fine live-stock (especially horses). Total area, 2,480 sq. m.; total pop. 545,000. (2) Cap. of above; leather goods, soap, machinery, musical instruments. Pop. 53,000.

Old Fletton, urb. dist., Hunts, England, 1 m. S. of Peterborough; brickfields. Pop. 7,500.

Oldham, tn., Lancs, England, 6 m. N.E. of Manchester; one of leading cotton tns.; also manufactures silks, machinery, leather, sewing machines, gas meters; important collieries in vicinity. Pop. 140,300.

Old Meldrum, vil., Aberdeenshire, Scotland, 16 m. N.W. of Aberdeen; distilling, turnip seed. Pop. 1,000.

Olean, city, New York, U.S.A., on

Allegheny R., 60 m. s.e. of Buffalo; oil refineries, natural gas, bottles, leather, oil-well supplies. Pop. 21,000.

Oléron (*ô-lê-rôn*), isl., Bay of Biscay, France, at mouth of R. Charente; surface flat and fertile; grain, wine, fruit, fisheries. Pop. 15,500.

Olifants River. (1) Riv., s. Cape Prov., S. Africa; flows w. through Oudtshoorn to join Gouritz R., which falls into sea w. of Mossel Bay. Length, 157 m. (2) Riv., Cape Prov., S. Africa; enters Atlantic Ocean c. 75 m. n. of St. Helena Bay; chief trib., Doorn. Length, c. 150 m. (3) Riv., Transvaal, S. Africa; rises in Drakensbergs; flows n. and e. to join R. Limpopo in Portuguese E. Africa.

Ol'erton, tn., Notts, England, 9 m. n.e. of Mansfield; near n. border of Sherwood Forest, and convenient centre for 'the Dukeries.' Pop. 2,000.

Ol'mütz. See OLOMOUC.

Ol'ney, tn., Bucks, England, on R. Ouse; boot and shoe making; poet Cowper resided here for many years. Pop. 2,700.

Olomouc (*ol'omôts*), formerly Olmütz, tn., Moravia, Czechoslovakia, on R. Morava; cereals and cattle; manufactures malt, beer, sugar, starch. Pop. 57,500.

Ölsnitz (*ools'nêts*). (1) Tn., Saxony, Germany, 26 m. s.w. of Zwickau; carpets, curtains, agricultural implements. Pop. 14,000. (2) Tn., Saxony, Germany, 16 m. w. by s. of Chemnitz; rich coal mines, textiles. Pop. 16,000.

Ol'ten, tn., Solothurn, Switzerland, on R. Aar; important rly. jn. Pop. 13,000.

Olympia, cap. Washington, U.S.A.; at head of Puget Sound; machinery; trades in agricultural products, wool, and timber. Pop. 8,000.

Olym'pus. Mountain range, Greece, separating Macedonia and Thessaly; greatest height, c. 9,800 ft.; snow-clad; legendary home of the gods.

Omagh (*ô-nî'*), cap. Tyrone, N. Ireland; mkt. tn.; linen industry; agricultural trade. Pop. 5,100.

Omaha (*ô-mâ-haw*), riv. port and chief city, Nebraska, U.S.A., on the Missouri R.; important rly. centre; chief industries: ore and metal refining and smelting works, railway repair shops; flour and grist mills. South Omaha is centre of the largest meat-packing industry in the world after Chicago and Kansas City; Fort Omaha is signal service, balloon and wireless experimental station of the U.S.A. army. Pop. 214,000.

Oman, state, s.e. Arabia; between Persian Gulf, Gulf of Oman, and Indian Ocean; under supervision of govt. of India; surface mountainous (Jebel Akhdar, c. 10,000 ft.); climate hot and dry; irrigation necessary; produces dates, vegetables, cereals; pearls. Cap. Muscat. Area, 82,000 sq. m.; pop. (est.) 500,000.

Omdurman, tn., Anglo-Egyptian Sudan, on l. bk. of R. Nile, opposite Khartoum; Arab trade centre for ivory, ostrich feathers, gum arabic, cattle, and camels; here Dervishes were defeated by Kitchener (1898). Pop. 79,000.

Omis (*ô'mish*), port, Dalmatia, Yugoslavia, 12 m. s.e. of Split (Spalato); muscatel wine. Pop. 15,000.

Omsk, important tn. and riv. port, Siberia, at junction of Rs. Om and Irtysh, on Trans-Siberian Rly.; caravan centre; brick and pottery works, breweries, distilleries, agricultural machinery; cloth; dairy produce exported. Pop. 162,000.

Onega (*o-nâ'ga*). (1) Port, Archangel, Russia, at mouth of Onega R.; sawmills, boat building, fisheries, and large timber trade. Pop. 5,500. (2) Lake, Karelia Rep., n.w. Russia; connected with Volga R. by canals; ice-bound Dec. to May; fisheries. Area, 3,765 sq. m. (3) Riv., Russia; rises s. of L. Onega, but not connected with it; flows into White Sea; salmon and lamprey fisheries. Length, 240 m.

Oneida (*ô-nî'da*), city, New York, U.S.A., on Erie Canal; makes silver-plated wares. Pop. 11,000.

Onomichi (*ō-nom-i'chū*), port, Honshu, Japan, on Inland Sea; manufactures fancy mats; two fine old temples. Pop. 31,000.

Ontario. (1) Province, Canada; bounded s. by St. Lawrence R., Great Lakes, and U.S.A.; stretches N. to Hudson Bay, W. to Manitoba, and E. to Quebec; crossed by Laurentian plateau; N. of plateau is Clay Belt, with fertile soil; principal rvs. are St. Lawrence and its trib. Ottawa; lakes are Nipigon, Nipissing, etc.; rainfall varies between 30 and 40 in.; great extremes of heat and cold in N., but air generally dry and bracing. Very fertile. Immense mineral wealth; gold and silver mined in increasing quantities to N. of L. Superior; nickel, copper, cobalt, arsenic, and bismuth; petroleum. Settled and agricultural portion of prov. lies S. of Laurentian plateau; 240,000 sq. m. of forests; agriculture is the great industry; maize, grapes, apples, tomatoes, peaches, and tobacco grow freely; dairy farming supplies numerous butter and cheese factories. Industries are important; the chief articles produced are farm machinery, carriages, railway rolling stock, cottons and woollens, leather goods, and furniture; pork packing; lumbering trade. Electrical energy from Niagara Falls supplies a large area; settled portion of prov. covered with a network of railways; during open season water traffic is very great; excellent canal system. Chief tns., Toronto (cap.), Ottawa (cap. of Dominion), Hamilton, London. Area, 407,262 sq. m.; pop. 3,229,000. (2) Lake, most easterly and smallest of Great Lakes of N. America; connected with L. Erie by Niagara R. and drained by St. Lawrence. Canadian ports, Hamilton, Toronto, and Kingston; U.S. port, Oswego. Area, 7,340 sq. m.; maximum depth, 740 ft.

Onteniente (*on-tā-nē-en'tā*), tu., E. Spain, 45 m. S. of Valencia; manufactures paper, furniture, brandy, linen, woollen goods. Pop. 12,500.

Oodnadat'ta, tn., S. Australia; N.W. of L. Eyre; on rly. from Port Augusta to Alice Springs.

Ookiep (*ō-kēp'*), mining tn., Namaqualand, Cape Prov., S. Africa, 92 m. E.S.E. of Port Nolloth; copper ores in dist. Pop. 2,000 (75 whites).

Onalashka, or UNALASKA. See ALEUTIAN ISLANDS.

Oot'acamund, tn., Nilgiri Hills dist., Madras, India; summer headquarters of Madras govt.; chief sanatorium in S. India; alt. 7,500 ft. Pop. 19,500.

Op'ava, formerly TROPPAU, cap., Silesia, Czechoslovakia, on Opava trib. of R. Oder; textiles, machinery, brewing; beet sugar. Pop. 33,500.

Opon, tn., Cebu, Philippines, on Mactan I., opposite Cebu city; scene of death of Magellan (1421); coconuts. Pop. 21,000.

Oporto, city, Portugal, at mouth of R. Douro; important seaport and commercial centre; centre of port wine trade; sardine fisheries; cotton, wool, and silk; hats, soap, tobacco, iron and steel goods, leather; distilling, sugar refining, tanning. Pop. 216,000.

Op'eln, tn., Silesia, Prussia, on R. Oder; leather goods, cement, wood, cattle, and minerals exported. Pop. 41,000.

Oradea (*ō-rād'yā*), formerly NAGY-VARAD, tn., W. Romania; rly. jn.; agricultural market; manufactures pottery. Pop. 49,000.

Oran, port, Algeria, on Mediterranean Sea; French military centre and naval station; exports wool, cereals, wine, esparto grass, cattle, sheep, hides, tomatoes, potatoes. Pop. 150,000.

Orange (1) (*ō-ranzh'*). Tn., Vaucluse, S. France, 18 m. N. of Avignon; numerous Roman remains; silks, brooms, beet sugar, fruit. Pop. 7,000. (2) Tn., New South Wales, Australia, 30 m. N.W. of Bathurst; bracing climate; sanatorium; gold, copper, silver mines; breweries, tanneries. Pop. 8,000. (3) City, New Jersey, U.S.A., 11 m. W. of New York; electrical goods, hats, boxes.

Pop. 36,000. (4) Largest S. African riv.; rises in Drakensberg Mts., π . Basutoland; flows to Atlantic Ocean; forms s. boundary of Orange Free State; receives Caledon and Vaal on r. bk.; navigation impeded by bar at mouth and rapids 20 m. farther up. Length, c. 1,300 m.

Orange Free State, inland prov., Union of S. Africa; bounded n. and n.w. by Transvaal, w. and s. by Cape Prov., π . by Basutoland and Natal; surface a plateau from 3,000 to 5,000 ft. above sea-level, with a few low ridges and numerous isolated hills, known as kopjes, not exceeding 7,000 or 8,000 ft.; on borders of Natal are Drakensberg Mts. Rivers are Vaal (n. boundary), Orange (s. boundary), Modder, Caledon, Klip; none navigable; no lakes. Climate healthy, but dry and hot; ann. rainfall, c. 20 to 30 in. in n., c. 14 in. in w. and s.w., where droughts are common and severe; hottest in w., where temperatures of 105° F. are not unusual. Flora scanty; plains covered with grass after rains, but for many months dry and barren; large tracts of pasture and arable land; small area under cultivation (mainly n. and π). Fauna includes hyena, lynx, baboon, monkey, ant-bear, wild-cat, jackal, springbok; numerous snakes, tarantulas, scorpions; destructive locust plagues. Principal products: wheat, maize, Kaffir-corn, fruit, tobacco; important stock rearing (sheep, cattle, horses, ostriches); coal mines in n.; diamond mine in w.; other products, wool, skins, ostrich feathers, hides, mohair, mealies, wheat, and dairy produce. Majority of pop. is Dutch-speaking. Cap. is Bloemfontein. Area, 49,647 sq. m.; pop. 629,000 (including 202,000 whites).

Örebro (oo'ra-brö). (1) Prov., central Sweden. Area, 3,561 sq. m.; pop. 221,500. (2) Cap. of above, 100 m. w. of Stockholm; trade in iron-mining products and timber; machine shops, chemical works; shoe and match factories. Pop. 37,000.

(3,601)

Or'egon, Pacific State, U.S.A., is bounded n. by Washington, w. by Pacific Ocean, s. by California and Nevada, and π . by Idaho; coast-line, c. 300 m., steep and rocky, with numerous indentations; state traversed by volcanic and snow-capped mts.—Cascade Mts. parallel with coast; Steens Mts. in s.e.; Blue Mts. in π ; extensive plains and large valleys, with fine arable and pasture land; principal rivs. are Columbia, and tribs. Willamette, Rogue; numerous lakes in s. Climate mild on coast, with heavy rainfall in winter; dry and hot π . of Cascade Mts., with severe winters; irrigation necessary in some parts; extensive forests. Principal products: wheat, oats, hay, sugar-beet, potatoes, fruits, timber, live-stock, wool, dairy produce; gold, silver, copper, coal are mined; lead, gypsum, quicksilver, nickel, opals found. Chief industries are lumbering, flour milling, fish canning, paper making, slaughtering and packing, machinery; valuable fisheries. Principal tns. are Portland and Salem (cap.). Area, 96,699 sq. m.; pop. 1,065,000.

Orel', or **Orlov**. (1) Prov., European Russia; surface undulating and well-cultivated; principal rivs., Oka and Sosna; agriculture on black earth soils; rye, oats, potatoes; horses and cattle reared; manufactures machinery, manures, wagons, leather, and glass; tobacco, oil, hemp produced. Area, c. 12,000 sq. m.; pop. 1,883,500. (2) Cap. of above, 100 m. s.w. of Tula; produces candles, ropes, oil, flour; distilleries, breweries, tobacco factories; univ. (1919). Pop. 76,000.

O'renburg. (1) Prov., European Russia; surface hilly; desert and steppe land; 'black earth' near Ural Mts. very fertile; stock raising; coal, salt; leather; goats'-wool shawls. Area, c. 23,000 sq. m.; pop. 674,500. (2) Cap. of above, on Ural R.; saw-milling; textiles, metal goods, sugar are chief articles of commerce; caravan centre for central Asia. Pop. 122,000.

Oren'sa. (1) Prov., n.w. Spain;

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mountainous; watered by Minho R.; climate humid; black cattle and other stock. Area, 2,694 sq. m.; pop. 418,500. (2) Cap. of above, on Minho R.; manufactures flour, leather, iron, chocolate; hot springs known to Romans. Pop. 18,000.

Or'ford, fishing vil. and par., Suffolk, England, 16 m. N.E. of Ipswich; oyster and other fisheries; former importance ruined by encroachments of the sea. Pop. (par.) 850.

Oriente (*ô-rê-en-lâ*), prov., E. Cuba; mountainous, with fertile valleys and plains; sugar, tobacco, coffee, cocoa, bananas produced; copper, iron, manganese, mercury, petroleum, marble, slate found. Area, 14,211 sq. m.; pop. 886,000.

Oriñuela (*ô-rê-wâ-lâ*), tn., Alicante, S.E. Spain, 13 m. N.E. of Murcia; in fertile plain; leather; silk and other textiles; wine, cereals, fruit, oil; remains of Moorish stronghold. Pop. 37,500.

Oril'lia, tn., Ontario, Canada, on w. of L. Couchiching, 65 m. N. of Toronto. Pop. 7,900.

Orinoco, riv., S. America; rises in Sierra Parima, flows through Venezuela, and forms delta c. 120 m. before its entrance into Atlantic Ocean; basin densely wooded and hilly; chief port, Bolivar. The Cassiquiare, which leaves the Orinoco c. 150 m. below its source, establishes water communication with the Amazon by joining the Rio Negro. As the Orinoco and its tribs. are navigable for hundreds of miles, the river system is of great commercial importance. Length, c. 1,500 m.

Ori'sa. See BIHAR AND ORISSA.

Orizaba (*ô-rê-thâ-ba*). (1) Tn., Vera Cruz, Mexico; cotton mills; coffee, cotton, sugar, maize, tobacco; first locality visited by Cortez. Pop. 42,000. (2) Volcanic mountain, between Puebla and Vera Cruz, Mexico; highest peak in Mexico (c. 18,300 ft.).

Ork'ney Islands, group of islands off N. coast of Scotland; separated from mainland by Pentland Firth; comprise twenty-nine inhabited is-

lands and thirty-nine smaller islands; principal isl., Mainland or Pomona, containing more than half pop.; surface low except in Hoy; numerous lakes, principal being Stenness and Harray, in Mainland; coast-line irregular, with deep bays; navigation rendered difficult by rapid currents. Antiquities include cairns, brochs, stone circles (Standing Stones of Stennis), Picts' houses, castles, and churches. Islands were under Norse rule (875-1231); pledged to Scot. crown (1468); now form a Scottish co. Agriculture and fishing are leading industries. Chief tns., Kirkwall (cap.) and Stromness on Mainland. Area, 376 sq. m.; pop. 22,100.

Orlan'do, tn., Florida, U.S.A., 70 m. N.E. of Tampa; tourist resort, and centre of citrus fruit-growing district. Pop. 27,000.

Orleans, cap. Loiret, France, on R. Loire; commercial centre; manufactures blankets, cottons, machinery, agricultural implements, tobacco; wine, grain, wool, oil, live-stock; house and statue of Joan of Arc (Maid of Orleans). Pop. 63,000.

Orlov. See OREL.

Orme's Head, GREAT, headland, Carnarvonshire, Wales; immediately N.W. of Llandudno. To the E. is a smaller promontory known as Little Orme's Head.

Or'miston, vil. and par., E. Lothian, Scotland, 3 m. S.E. of Tranent; coal mines. Pop. (par.) 1,850.

Or'mond, winter resort, Florida, U.S.A., on E. coast; Ormond-Daytona beach (20 m. long) is favourite course for motor races. Pop. 1,850.

Orms'kirk, urb. dist., mkt. tn., Lincs, England, 12 m. N.E. of Liverpool; centre of potato-growing dist.; ironfounding, brewing, rope making. Pop. 17,100.

Ormuz. See HORMUZ.

Orne (*orn*), dep., N.W. France; forests in w.; chief riv., Orne; wheat, oats, barley cultivated; apples for cider extensively grown; its horses are famous; manufactures ironware, lace, linen; has iron mines, mineral

springs. Chief tn., Alençon. Area, 2,371 sq. m.; pop. 278,000.

Orontes (*ô-ron-têz*), riv., N. Syria; rises in Anti-Lebanon Mts.; flows N. to Antioch, then W.S.W. to enter Mediterranean Sea. Length, 200 m.

Or'pington, tn., Kent, England, 13 m. S.E. of London; fruit and hops grown; gives name to a well-known breed of poultry. Pop. 7,000.

Or'rell, urb. dist., Lancs, England, 3 m. W.S.W. of Wigan; cotton, nails; coal mining. Pop. 7,000.

Or'sha, tn., White Russia, U.S.S.R., on R. Dnieper; has tanneries and ironworks; river port at head of navigation on R. Dnieper. Pop. 21,500.

Orsova (*ôr-sho-va*), tn., Romania, on R. Danube, above the 'Iron Gates.' Pop. 5,000. On an isl. 3 m. down the riv. is New Orsova, formerly a Turkish fortress. Pop. 3,000.

Ortèzes (*or-têz*), tn., Basses-Pyrénées, France, 25 m. N.W. of Pau; leather, hams, chocolate; scene of Wellington's victory over Soult (1814). Pop. 40,000.

Ortigueira (*or-tê-gê-râ*), port, Corunna, N.W. Spain, S. of Cape Ortegal; sea-bathing resort. Pop. 19,000.

Ort'ler Spitz, mt., Tirol, Italy; highest peak in E. Alps (12,800 ft.).

Oruro (*ô-roo-rô*). (1) Dep., Bolivia; part of L. Titicaca basin; much of it is arid; tin, silver, copper. Area, 20,657 sq. m.; pop. 140,000. (2) Cap. of above; alt. 12,158 ft.; gold, silver, and tin mines; rly. centre. Pop. 33,000.

Orvieto (*or-vê-â-tô*), city, Perugia, Italy, 60 m. N. of Rome; situated on isolated rock, 1,000 ft. high; has numerous interesting houses, palaces, and churches. Wines. Pop. 19,400.

Osaka (*ô-sâ-kâ*), port, Honshu, Japan, on Osaka Bay; largest city in Japan; a network of canals; cotton mills, iron and glass works, sugar refining, shipbuilding. Pop. 2,115,000.

Osborne, former royal residence near Cowes, Isle of Wight, England; now convalescent home for naval and military officers.

Oschersleben (*osh-ers-lâ-ben*), tn., Saxony, Prussia, 24 m. by rail W.S.W. of Magdeburg; sugar, chocolate, bricks, tiles, agricultural implements, and artificial manures. Pop. 13,500.

Osh, town, Ferghana, Kirghiz, U.S.S.R., 100 m. E. of Khoqand; cotton, grain, fruit; trades with China; near it is 'Throne of Solomon' rock, a place of Moslem pilgrimage. Pop. 29,000.

Osh'awa, city, Ontario, Canada, on L. Ontario, 30 m. E. of Toronto; manufacturing tn. Pop. 25,600.

Osh'kosh, city, Wisconsin, U.S.A., on W. shore of L. Winnebago; lumber and allied industries; meat packing and dairy farming; flour, boilers, motors. Pop. 40,000.

Osijek (*ô-sê-yek*), formerly Esseg, tn., Slavonia, Yugoslavia, on R. Drava; cotton, silk, leather, beet-sugar, and glass. Pop. 34,500.

Osimo (*ô-sê-mô*), tn., Marche, Italy, 8 m. S. of Ancona; silk, ribbons, and hosiery. Pop. 20,000.

Os'lo, formerly CHRISTIANIA, cap. of Norway, at head of fiord of same name; founded 1048; manufactures woollens, cotton yarns, tobacco, condensed milk, paper, oil; well-built city; has fine harbour, ice-bound in winter; exports timber, fish, matches, ice. Pop. 251,000.

Osnabrück (*os-nâ-brook*), tn., Hanover, Prussia, 28 m. N.N.E. of Münster; cigars, chemicals, nails, machinery, musical instruments. Pop. 89,000.

Os'sa, mountain, Thessaly, Greece; modern Kissavo (6,398 ft.); joins on to Pelion.

Os'sett, tn., W. Riding, Yorks, England, 2½ m. W. of Wakefield; woollen mills; collieries; centre of shoddy trade; mineral springs. Pop. 14,800.

Ostend', wat.-pl., W. Flanders, Belgium; second port of Belgium; on important passenger route between London and Continent; headquarters of Belgian fishing fleet; fashionable holiday resort; fisheries, oyster-beds; occupied by Germans 1914-18. Pop. 44,000.

Osterode (*os-tâ-rô-dê*), tn., E.

Prussia, Germany, on L. Drewenz; machinery, sawmills, agricultural produce. Russians defeated here (1914). Pop. 16,000.

Ostia, harbour of anc. Rome, Italy, at mouth of R. Tiber; place attained great commercial importance, but declined after construction of safer harbours. Modern vil. near anc. site, contains cathedral.

Ostrau. See MORAVSKA OSTRAVA.

Osuna (*ô-soo'na*), town, s. Spain, 52 m. E.S.E. of Seville; grain, fruit, mats, esparto ropes, bricks, pottery. Pop. 16,000.

Os'waldtwistle, urb. dist., Lancs, England, 3 m. E.S.E. of Blackburn; cotton mills, paper works, chemical works, potteries. Pop. 14,200.

Oswego, port, New York, U.S.A., on L. Ontario; falls of Oswego R. supply water-power; match factories; textiles; hosiery; engines. Deep Rock mineral springs are located here. Pop. 24,000.

Os'westry, tn., Shropshire, England, 15 m. N.W. of Shrewsbury; manufactures iron goods, leather, agricultural machinery. In neighbourhood is old British camp. Pop. 9,800.

Otago (*ot-ä'go*), provincial dist., in s. of S. Island, New Zealand; rugged mountains and forests in w.; agricultural land in e.; contains Sutherland waterfall (1,904 ft.); agriculture, sheep farming, fruit culture, gold mining. Cap. Dunedin, on Otago Harbour. Area, 25,312 sq. m.; pop. 220,000.

Otakeite. See TAHITI.

Otaru (*ô-tä'roo*), port, Hokkaido, Japan, 100 m. N. of Hakodate; centre of herring fisheries. Pop. 134,500.

Ot'ley, urb. dist., mkt. tn., W. Riding, Yorks, England, on R. Wharfe, 8 m. N. of Bradford; worsteds, leather, paper, and printing machines. Pop. 11,000.

Otran'to. (1) Port, Apulia, s.e. Italy, on Strait of Otranto, 29 m. by rail s.e. of Lecce; castle and cathedral; destroyed by Turks (1480). Pop. 3,000. (2) STRAIT OF, strait be-

tween Italy and Albania, leading to Adriatic Sea; width c. 40 m.

Ot'tawa. (1) Cap. of Dominion of Canada, in Ontario, on R. Ottawa; centre of lumber trade; manufactures leather, ironware, machinery, matches, furniture, electric cars; flour mills. New Parliament buildings, to replace those burnt in 1916, erected 1916-20. Pop. 125,000. (2) Riv., Canada; principal trib. of St. Lawrence, which it enters opposite Montreal I.; very large lumber trade; Chaudière and other falls furnish water-power; navigable for small craft to Ottawa, whence Rideau Canal is cut to L. Ontario. Length, 685 m.

Ot'terburn, vil., Redesdale, Northumberland, England, 18 m. N. of Hexham; scene of Douglas's defeat of Hotspur in 1388, celebrated in ballads *Chevy Chase* and *The Battle of Otterburn*.

Ot'tery St Mary, mkt. tn., Devonshire, England, 12 m. N.E. of Exeter; birthplace of Coleridge. Pop. 3,700.

Ottum'wa, city, Iowa, U.S.A., on Des Moines R.; coal mines, iron and steel works; starch, flour, canned goods. Pop. 28,000.

Oudenarde (*oo-dên-ärd'*), tn., E. Flanders, Belgium, on R. Schelde; textile industries, leather. Marlborough defeated French under Vendôme (1708). Pop. 7,000.

Oudh (*oud*). See UNITED PROVINCES OF AGRA AND OUDH.

Oudishoorn (*outs'hörn*), tn., Cape Prov., S. Africa, on Olifants R., 78 m. N. of Mossel Bay; ostrich farms; tobacco, lucerne, and fruit. Pop. 11,000 (5,650 whites).

Oullins (*ool-än'*), tn., Rhône, France, near Lyons; textiles, machinery, glass, leather; nursery gardens. Pop. 12,000.

Oulton Broad (*öl'ton*), w. ward of Lowestoft bor., Suffolk, England; yachting centre for Broads. Pop. 4,650.

Oulu (*ö'lu*), formerly ULEÅBORG. (1) Dep. Finland; includes part of Lapland; forests; numerous lakes. Area, 65,263 sq. m.; pop. 414,500.

(2) Cap. of above, on Gulf of Bothnia; shipbuilding; salmon fisheries; exports timber, hides, leather, pitch, tar, butter. Pop. 23,000.

Oun'dle, tn., on R. Nen, Northants, England; public school; brewing. Pop. 2,000.

Ouro Preto (*ô-rô prê'to*), city, Minas Geraes, Brazil, 170 m. N. of Rio de Janeiro; alt. 3,750 ft.; once famous gold-mining centre, but mines now almost exhausted; iron, manganese, asbestos found in vicinity. Pop. c. 51,000.

Ouse (*oos*). (1) Riv., Yorks, England; formed by junction of Rs. Swale and Ure, enters Humber; navigable to York; length, 60 m. (2) **GREAT OUSE**, riv., Northants, England, flows through S. Fenland into Wash; navigable to Bedford; length, 160 m. (3) **LITTLE OUSE**, trib. of Great Ouse. (4) Riv., Sussex, England; flows through S. Downs into English Channel.

Ovar', tn., Beira, Portugal, 20 m. S. of Oporto; fishing centre; wine, wheat, onions. Pop. 11,500.

O'ver, par. and tn., Cheshire, England, $4\frac{1}{2}$ m. W. of Middlewich; salt and chemical trade; cattle and sheep fairs. Pop. (par.) 7,500.

Overysael (*ô-ver-is-sel*), prov., Holland; between Zuyder Zee and Prussian provs. of Hanover and Westphalia; W. is generally under cultivation; rich pasture in E. Dairying, fishing, cotton manufacture, and brick making. Cap. Zwolle. Area, 1,293 sq. m.; pop. 504,000.

Oviedo (*ô-ee-dô*). (1) Prov., N. Spain; former principality of Asturia; coal largely mined; forests; industries include agriculture, stock raising, and fishing. Area, 4,205 sq. m.; pop. 798,500. (2) Cap. of above, 16 m. from Gijón, Bay of Biscay; manufactures textiles, leather, matches, hardware, and has national arms factory. Pop. 72,500.

Owensboro, city, Kentucky, U.S.A., on Ohio R.; centre of oilfield; tobacco, lumber; centre of farming and stock raising region. Pop. 21,000.

Owen Sound, port, Ontario, Canada, on Georgian Bay; shipbuilding; large grain elevators. Pop. 12,500.

Ox'ford, co. tn., Oxfordshire, England; at junction of Rs. Cherwell and Thames; famous univ. is believed to date from 12th cent., and now comprises 21 colleges and one hall; univ. opened for first time to women (1920). Industries include printing and publishing; motor works. Pop. 80,500.

Ox'fordshire, or **Oxon**, co., England; bounded N. by Warwick and Northants, E. by Bucks, S. by Berks, W. by Gloucester; surface generally level; N. is mostly bare, but in S. are finely wooded hills and valleys; S.E. crossed by Chiltern Hills; well watered by numerous rivs., including Thames and its tribs., Windrush, Evenlode, Cherwell, and Thame; one of most productive cos. in England; chief crops are barley, oats, and wheat; stock raised; paper made at Shiplake and elsewhere, gloves at Woodstock, blankets at Witney, agricultural implements at Banbury; manufactures of bricks, tweeds, and lace also carried on. Chief tns. are Oxford (co. tn.), Banbury, Henley, Chipping Norton, and Woodstock. Area, 749 sq. m.; pop. 209,600.

Ox'us, or **AMU DARYA**, important riv., S.W. Central Asia; rises in Pamir plateau, forms for some distance boundary between Afghanistan and Tadzhik and Uzbek reps., U.S.S.R.; flows into S. extremity of Sea of Aral; many tribs. in upper course, but few after it enters deserts of Turkmen, where streams often disappear in sand; forms a delta c. 90 m. from Sea of Aral; banks in some parts fertile, and irrigation canals are made; in some seasons Oxus floods large tracts; navigable to Charjui, where it is crossed by rly. from Nerv to Samarqand; regular steamer service. Length, 1,450 m.

Oyster Bay, summer resort, New York, U.S.A., on N. coast of Long I.; oyster fisheries. Pop. (par.) 9,200.

Oys'termouth, better known as 'The Mumbles,' coast par. and vil., Glamorganshire, Wales; a favourite wat.-pl.; oyster dredging extensively carried on. Pop. 9,000.

Ozark' Mountains, area of highlands

in Missouri, Arkansas, Oklahoma, Kansas, and Illinois, U.S.A.; summer resort.

Ozorkow (*ôz-ôr'huf*), tn., Lodz, Poland, 15 m. n.w. of Lodz; cloth manufactures. Pop. 11,000.

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Paarl, tn., Cape Prov., S. Africa, 40 m. N.E. of Capetown; wines; fruit farming and tobacco growing; wool washing and carriage building. Pop. 13,500 (6,700 whites).

Pabjanice (*pâb-yâ-nî'se*), tn., Poland, 10 m. s.s.w. of Lodz; textiles; paper; agricultural machinery. Pop. 30,000.

Pabna. (1) Dist., Bengal, India; low-lying; rice, jute. Area, 1,678 sq. m.; pop. c. 1,500,000. (2) Cap. of above, 75 m. w.s.w. of Dacca; oil, bricks, carpets. Pop. c. 20,000.

Pachuca (*pâ-choo'ka*), cap. of Hidalgo, Mexico, 55 m. N.N.E. of Mexico City; *gat*, c. 8,000 ft.; silver mines; meteorological observatory. Pop. 41,000.

Pacific Ocean, largest ocean of world, occupying about half water surface of the globe; extends from Bering Strait to Antarctica, and lies between America (on E.) and Australia and Asia (on W.); total length from N. to S., c. 8,500 m.; greatest breadth (near equator), c. 9,500 m. Area, 63,785,000 sq. m. Salinity is less than that of Atlantic. Mean depth is c. 2,500 fathoms; greatest depth on Asiatic side, E. of Mindanao (Philippines), 35,433 ft. (greatest recorded ocean depth). Has innumerable continental and oceanic islands, mainly in centre and W., either of volcanic or coral formation. Principal prevailing winds are N.E. and S.E. trade-winds, with broad belt of equatorial calms between them, and W. belts to N. and S.; monsoons also blow regularly, and violent storms occur in China Sea, etc.

Pacific Ocean was discovered by Balboa (1513); first traversed by Magellan (1520-1), and named Pacific on account of calm weather encountered there. Chief steamship routes are from Vancouver and San Francisco to New Zealand, Australia, and Japan; route from these lands to E. U.S.A. and Europe passes round Cape Horn or through Panama Canal.

Padang', port, Sumatra, Dutch E. Indies, on W. coast; exports coffee, spices, rubber, tobacco, copra, coal. Pop. 41,500.

Pad'dington, N.W. metropolitan bor., London co., England; contains terminus of Great Western Rly. Pop. 145,000.

Pad'ernborn, tn., Westphalia, Prussia, 63 m. N.E. of Dortmund; glass, soap; trade in cattle and grain. Pop. 33,500.

Pad'ham, urb. dist., Lancs, England, on R. Calder, 3 m. W. of Burnley; cotton mills, coal mines, stone quarries. Pop. 11,600.

Pad'stow, mkt. tn. and port, N. Cornwall, England; harbour of refuge; fisheries; agricultural trade. Pop. 1,900.

Pad'ua. (1) Prov., s. Venetia, Italy; fertile plain; wheat, rice, wine, silk. Area, 826 sq. m.; pop. 634,000. (2) Cap. of above, on R. Bacchiglione; has arcaded streets and ancient bridges; centre of learning and art in Middle Ages and Renaissance; chief industries: machine works, chemicals, silk, distilleries. Pop. 125,500.

Padu'cah, city, Kentucky, U.S.A., at junction of Tennessee and Ohio

rivs.; sawmills; rly. workshops; trade in tobacco. Pop. 34,000.

Pahang, Federated Malay State, on E. of Malay Peninsula. Drained by Pahang and other rivs. Large stretches of forest. Tin, gold, lead; fish. Cap. Kuala Lipis. Area, 14,000 sq. m.; pop. 146,000.

Pahlavi (*pā-lā-vē*), formerly ENZELI, port, N. Persia, on Caspian Sea, 18 m. N.W. of Resht; exports rice, hides and skins, raisins, cotton, fruit. Pop. c. 20,000.

Paignton (*pān'ton*), seaside resort, Devonshire, England, 2 m. S. of Torquay; cider. Pop. 18,400.

Paisley (*pā's'le*), riv. port, Renfrewshire, Scotland, on White Cart R. near its junction with R. Clyde; old abbey, founded c. 1163; staple industry manufacture of cotton thread; other industries include dyeing, bleaching, weaving, engineering, founding, brewing, distilling, tanning; manufactures of starch, soap, corn-flour, and preserves. Pop. 86,400.

Pakhoi, port, Kwangtung, China, on Gulf of Tongking; exports sugar, indigo, ground-nuts. Pop. 35,000.

Pakokku (*pā-kok'oo*), cap., Pakokku dist., Upper Burma, on R. Irrawaddy; commercial centre; shipbuilding yards; millet, sugar-palms, rice, tobacco cultivated in dist.; oilfields; teak. Pop. 19,500.

Palamau, dist., Chota-Nagpur, Bihar and Orissa, India; c. three-fourths jungle-covered; coal mines; silk and lace exported. Chief tn., Daltonganj, 120 m. S.E. of Benares. Area, 4,916 sq. m.; pop. 733,500.

Palamecottah, tn., Tinnevely, S. Madras, India; headquarters of dist. Pop. 47,000.

Palanpur, Indian state, Gujarat, Bombay, India; mountainous and well forested in N.; wheat, rice, sugarcane cultivated. Chief tn., Palanpur, 75 m. N. of Ahmadabad. Area, 1,766 sq. m.; pop. 237,000.

Palatinate. See BAVARIA.

Palau, or PELEW, W. group, Caroline Islands, Pacific Ocean; moun-

tainous; surrounded by coral reefs; bread-fruit, bananas, sugar-cane, tortoise-shell, mother-of-pearl, timber; mandated to Japan. Area, c. 200 sq. m.; pop. c. 10,000.

Palawan (*pā-lā'wan*), isl., Philippines; mountainous, forest-covered; exports rattans, resin, timber. Area, 4,500 sq. m.

Palazzolo Acreide (*pā-lāt-sō'lō āk-rā-ē'dā*), tn., Syracuse, Sicily; ruins of fine Greek theatre; magnificent tombs and primitive sculptures. Pop. 15,000.

Palembang, cap. of Palembang Residency, S. Sumatra, Dutch E. Indies; exports cotton, pepper, rubber, copra, coffee; health station for troops. Pop. 62,500.

Palencia (*pā-len'thē-ā*). (1) Prov., Old Castile, Spain; Cantabrian Mts. in N.; produces grain, wine; manufactures woollen rugs and mantles. Area, 3,256 sq. m.; pop. 192,000. (2) Cap. of above, on R. Carrion, 25 m. N. of Valladolid; centre of ironfounding, cloth, blanket, and flannel weaving. Pop. 20,000.

Palermo, cap. of Sicily, Italy; on N. coast; important seaport in sheltered bay; situated in fertile valley (Conca d'Oro) partly surrounded by mts.; chief products are machinery, chemicals, sumach, essences, sulphur, tartar, wine, oranges and lemons, tobacco; fine cathedral (1169-85). Pop. 394,000.

Palestine, country, W. Asia, on Mediterranean Sea; bounded N. by Syria, E. by Transjordan, S. by Hejaz and Egypt; length, 145 m.; average breadth W. of Jordan, 40 m. Because of its history is the "Holy Land" for Jews and Christians, and is again a national home for Jewish people. Country divided into (1) coastal plain of Philistia, Sharon, etc. (broken only by Mount Carmel), bordering Levant; (2) mountain and hill country of Judaea, Samaria, and Galilee; (3) Jordan rift-valley, El Ghor, containing the Dead Sea; principal riv., Jordan; lakes are Merom, Sea of Galilee, and

Dead Sea. Climate extremely hot in summer and wet in winter; olive, cedar, and sycamore trees; wheat, wine, olives, and many fruits; sheep and goats reared; rlys. running inland from Acre and Haifa, and from Jaffa to Jerusalem, are connected with line from Egyptian frontier; exports oranges, soap, water melons, wines, durra, barley, sesame, and almonds; trade mainly with Syria, U.K., and Egypt. During Great War Turkish sovereignty was overthrown by British under Allenby. Country now administered by Great Britain under mandate of League of Nations. Cap. Jerusalem. Area, c. 9,000 sq. m.; pop. 816,000 (including 572,500 Moslems, 154,500 Jews, and 80,500 Christians).

Palghat', tn., Malabar, Madras, India; important commercially and strategically owing to position in Palghat pass s. of Nilgiri Hills; key to w. coast. Pop. 46,000.

Palk Strait, strait separating India from Ceylon; passage difficult owing to shoals and coral reefs on either side; separated from Gulf of Manaar by Rameswaram I., Adam's Bridge, and Manaar I.

Pal'ma. (1) Port, Majorca, cap. of Balearic Isles; cathedral and palaces; trade in wine, cereals, fruit, and silk. Pop. 81,000. (2) Or **SAN MIGUEL DE LA PALMA**, one of Canary Islands, in Atlantic Ocean off African coast; mountainous; wines, silk, fruits, wax produced. Chief tn. Santa Cruz. Area, 280 sq. m.; pop. 53,000.

Palm Beach, vil., Florida, U.S.A., 66 m. N.E. of Miami; shore washed by Gulf Stream; fashionable winter resort. Pop. 1,000.

Palmerston. See **DARWIN**.

Palmerston North, tn., N. Island, New Zealand, 87 m. N. of Wellington; rly. jn.; dairy farming, sheep raising. Pop. 21,000.

Palmy'ra, anc. city, Syria, c. 130 m. N.E. of Damascus; once important centre of caravan trade; under Zenobia extended its sway far and wide, till captured by Romans; now

inhabited by wandering Arabs; ruins of city are extensive and magnificent.

Palwal', tn., Punjab, India, c. 40 m. s. of Delhi; of great antiquity; depot for cotton of dist. Pop. 9,300.

Pamiers (*pā-mā-d'*), tn., Ariège, France, 34 m. S.E. of Toulouse; wine, woollen goods, leather, chains and carriage springs. Pop. 10,000.

Pamirs (*pā-mērs'*), known as the 'Roof of the World,' lofty plateau region, Central Asia; where Hindu Kush, Himalayas, Kunlun, and Tien Shan Mts. converge; average height, c. 13,000 ft.; ranges are separated by broad valleys or *pamirs*; almost destitute of vegetation, except along banks of rivs. and lakes, where there is fine pasturage during summer months for great-horned sheep, etc.; climate severe and storms sudden and violent; inhabited by Kirghiz tribes.

Pam'pa, terr., Argentina, S. America, w. of Buenos Aires; belongs almost entirely to pampas region; cereals cultivated; large sheep and cattle ranches. Cap. Santa Rosa. Area, 56,320 sq. m.; pop. c. 105,000.

Pampl'o'na. (1) City, cap. of Navarre, Spain; strong fortress on spur of Pyrenees; agricultural trade. Pop. 33,500. (2) Tn., N.E. Colombia, S. America, 220 m. N.N.E. of Bogota; breweries, match factories; in vicinity are abandoned gold and silver mines. Pop. 20,000.

Panama'. (1) Rep., Central America; dep. of Colombia till 1903; traversed by Sierra de Chiriqui and Cordillera de Veragua; chief riv., Chagres; crossed by Panama Canal; climate tropical; soil very fertile, but greater portion unoccupied; industries are cattle raising, agriculture, and pearl fishing; important products are bananas, coconuts, coconuts, mother-of-pearl, rubber, sugar, coffee, and hides. Rep. is divided into nine provs.; chief ports, Panama and Colon. Area, 32,380 sq. m.; pop. 442,500. See also **PANAMA CANAL** and **CANAL ZONE**. (2) Cap. of above rep., on Panama Gulf, at Pacific terminus of Panama Canal;

cathedral; city (founded 1519) and harbour under jurisdiction of U.S.A. in all that relates to sanitation and quarantine. Pop. 59,500.

Panama Canal, ship canal crossing Isthmus of Panama. A French attempt to construct a canal began in 1882 but failed. The task was resumed by U.S.A., which purchased Canal Zone from Panama in 1904 (see CANAL ZONE), and the canal was formally opened on Aug. 15, 1914. The canal begins on Atlantic side at Cristobal, a dredged channel leading to the Gatun locks, where a lift of 85 ft. brings a ship into the artificial L. Gatun. The construction of Gatun dam, $1\frac{1}{2}$ m. long, 100 ft. high, $\frac{1}{2}$ m. wide at the bottom, was the outstanding engineering feature. After crossing lake (24 m.), canal enters Gaillard or Culebra Cut, 9 m. long, leaves it by Pedro Miguel lock, passes through Miraflores lock to sea-level, and then for 8 m. to Balboa on the Pacific. Length of canal proper is c. 42 m., ranging in width from 300 to 1,000 ft.; minimum depth, 41 ft. Time of transit from 7 to 8 hours. A rly. (47 m.) follows course of canal, connecting Colon and Panama; it belongs to U.S.A. Canal is open to world's shipping on equal terms. Opening of canal has changed routes between many countries; sea distances between European ports and Pacific coast of N. and S. America shortened by about 6,000 m. During 1930 6,185 vessels sailed through the Canal, of which 1,536 were British and 2,885 were U.S.A.

Panay (*pā-nā*), isl., Philippines; mountainous, well watered; cotton, rice, sugar-cane, coffee; port, Iloilo. Area, 4,448 sq. m.; pop. 750,000.

Panch Mahals, dist., Gujarat, Bombay, India; large forests; manganese and mica found in hills; timber exported. Chief tn. Godhra, 40 m. N.E. of Baroda. Area, 1,606 sq. m.; pop. 375,000.

Pandharpur, tn., Bombay, India, on R. Bhima, trib. of R. Kistna; temple; resort of pilgrims. Pop. 25,500.

(3,601)

Pangan'i, port, Tanganyika Terr., E. Africa, at mouth of R. Ruwu (Pangani); grows coconuts, sisal, maize, and sugar; dist. (6,000 sq. m.) not suitable for European settlement. Pop. 3,000.

Pangbourne, par. and vil., Berks, England, on R. Thames, $5\frac{1}{2}$ m. N.W. of Reading; nautical college. Pop. 1,950.

Pang'o-Pang'o, or PAGO-PAGO, port, Tutuila, Samoan Islands, Pacific Ocean, on S.E. coast; U.S.A. naval and coaling station. Has the only good harbour in group; high-powered radio station.

Panipat, tn., Punjab, India, 53 m. N. of Delhi; manufactures brass vessels, silver and glass ornaments, cotton goods, blankets. Pop. 27,500.

Panteg (*pan-tig*), urb. dist., Monmouthshire, England, 2 m. S.E. of Pontypool; coal mines, stone quarries, and foundries. Pop. 11,500.

Pantin (*pā-tān*), tn., Seine, France; N.E. suburb of Paris; glass works, sugar refineries, rly. shops, tobacco and chemicals, distilleries. Pop. 39,000.

Papeete (*pā-pē-ā-tē*), cap. Tahiti, Society Islands, S. Pacific Ocean; fine harbour; copra, phosphates, mother-of-pearl. Pop. 5,000.

Papua (*pā-poo-ā*). See NEW GUINEA.

Par, seaport tn., Cornwall, England, 8 m. S. of Bodmin; large pilchard fishery. Pop. 2,000.

Pará (*pā-rā*). (1) State, Brazil, S. America; bounded on N. by three Guianas; thickly wooded and well-watered region; communication carried on by rvs., especially Amazon; rubber is chief product; fruits and cacao cultivated; rubber, gutta-percha, tonka beans, sarsaparilla, gums, and Brazil nuts exported. Cap. Pará. Area, 443,789 sq. m.; pop. 1,376,000. (2) Or BELEM, or BELEM DO PARÁ, cap. of above, on Pará R.; founded (1615) by Portuguese. Chief export, rubber; entrepôt for Amazon river trade; naval arsenal. Pop. 236,500.

Paraguay (*pā-rā-gwī*), inland rep., S. America; bounded by Bolivia, Brazil, and Argentina; divided from N. to S. by Paraguay R., E. portion

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being larger and more important; large tract to w. of riv. unexplored. Surface consists of undulating plains, low hills, swamps, and dense forests; highest ground in N. and E.; chief rivs., Paraguay, Pilcomayo, and Paraná; soil fertile; vegetation luxuriant; leading industries are stock raising and cultivation of yerba maté (Paraguay tea), oranges, sugar, tobacco, maize, and cotton; forests produce fine timber, gums, dyes, and oils; iron, manganese, and copper abound; hides, timber, maté, tobacco, quebracho extract, cattle, and meat products exported. Inhabitants are chiefly Spaniards and Indians. Principal tns., Asunción (cap.) and Villa Rica. Area, c. 161,647 sq. m., of which c. 100,000 claimed by Bolivia; pop. c. 836,500.

Parahyba (*pá-rá-í'ba*). (1) N.E. state, Brazil, S. America; surface elevated; chief products are cotton, coffee, cocoa, sugar, rubber, tobacco. Area, 28,846 sq. m.; pop. 1,278,000. (2) Cap. of above; exports sugar and cotton. Pop. 53,000.

Paramaribo, cap. Dutch Guiana, S. America, on Surinam R.; coffee, cocoa, rubber, sugar, rum exported. Pop. 47,000.

Paraná (*pá-rá-ná*). (1) River, S. America; formed by junction of Rio Grande and Parahyba; flows w. between Paraguay and Argentina; chief trib., Paraguay; enters Rio de la Plata; navigable by steamers to Brazilian frontier near Iguassu Falls. Length, 2,000 m. (2) S. state, Brazil, S. America; drained by Paraná R.; extensive forests; exports Paraguay tea. Area, 93,269 sq. m.; pop. c. 938,500. (3) Cap. Entre Rios, Argentina, S. America, on Paraná R.; centre of fertile dist.; former cap. of Argentina. Pop. 36,000.

Paranaguá (*pá-rá-ná-guá*), seapt, Paraná, s. Brazil; exports Paraguay tea. Pop. 19,000.

Pardubice (*pár-doo-bit-se*), tn., Bohemia, Czechoslovakia, on R. Elbe; breweries, distilleries, sawmills, iron foundries; horse fairs. Pop. 25,000.

Parén'so, port, Pola, Italy, 30 m. s. by w. of Trieste; fishing, ship-building; cathedral; Roman remains. Pop. 12,500.

París. (1) Cap. of France; largest city of continental Europe, on R. Seine; important rly., riv., road, and canal centre; Seine divides the city into two regions, and is crossed by many bridges; heart of Paris is the Ile de la Cité, in midstream, with famous Gothic cathedral, Notre-Dame (13th cent.); city is comparatively flat, with exception of Montmartre, Buttes-Chaumont, and Montagne Ste. Geneviève. On r. bk. of R. Seine are Place de la Concorde; Place du Carrousel; Place Vendôme; Place de l'Etoile, with Arc de Triomphe, from which radiate twelve avenues, including the Champs Elysées, the most fashionable promenade; Place de la Bastille; Palais du Louvre, extending about $\frac{1}{2}$ m. along the river, with world-famous art collections; Jardin des Tuileries; Palais Royal, built by Richelieu; many famous churches, including La Madeleine; Hôtel de Ville (munic. headquarters); Bourse; Bibliothèque Nationale; Grand Opera (1861, largest in world); Trocadéro (1867, in Oriental style), with museums of sculpture and ethnography. On l. bk. is large Champ de Mars, with Eiffel Tower (984 ft.); opposite Ile de la Cité is Latin quarter, with Sorbonne (univ., founded 1253); Musée de Cluny; Panthéon; Luxembourg (1612-20), which includes fine modern art gallery; Hôtel des Invalides, with tomb of Napoleon I. Round Paris lie suburbs of Versailles, Saint-Cloud, Meudon, Sèvres, Saint-Denis, Montreuil, etc.; the famous Bois de Boulogne, with Longchamps (race-course), and Bois de Vincennes. Principal industries: ladies' clothes, hats, boots, shoes, perfume, jewellery, bronzes, mirrors, clocks, watches, decorative articles, scientific instruments, book publishing, objets d'art. City was the scene of the Peace Conference in 1919. Pop. 2,871,500. (2) City, Texas, U.S.A., 98 m. N.E.

of Dallas; ships cotton, vegetables, and fruit; makes flour, canned goods, and cotton-seed oil. Pop. 15,500.

Park'sburg, city, W. Virginia, U.S.A., on Ohio R.; petroleum dist.; oil refining, iron and steel works, lumber mills, furniture factories. Pop. 30,000.

Parkgate, vil., Cheshire, England, on estuary of R. Dee, 13 m. N.W. of Chester; part of urb. dist. of Neston and Parkgate; fishing; seaside resort. Pop. 5,700.

Par'ma. (1) Prov., Emilia, N. Italy; traversed by Apennines in s.; N. is fertile plain watered by tributaries of R. Po; produces corn, wine, fruit, cheese, and silk; several mineral springs. Area, 1,334 sq. m.; pop. 374,000. (2) Cap. of above; rose to great importance during Middle Ages; Parmesan cheese, silks, ironware, pianos, tobacco. Pop. 72,000.

Parnahyba (*pār-nā-ē-bā*). (1) Riv., N.E. Brazil; rises in Serra da Tabatinga; flows N.E. and enters Atlantic by a delta. Length, 800 m. (2) Port, Brazil, on above riv.; exports cattle, hides, cotton, tobacco. Pop. 24,300.

Parnas'sus (modern *Liakoura*), mt., Greece, to N. of Gulf of Corinth; sacred to Apollo and the Muses; alt. 8,070 ft.

Pär'nu, or **PERNAU**, port, wat.-pl., Estonia, close to Gulf of Riga; exports flax, timber, wood pulp. Pop. 21,000.

Parramat'ta, tn., New South Wales, Australia, 14 m. W. of Sydney; fruit growing, esp. oranges; tweed manufactured; racecourse. Pop. 16,000.

Par'ry Sound, tn., Ontario, Canada, on E. of Georgian Bay; lake port. Pop. 5,500.

Par'sons, city, S.E. Kansas, U.S.A.; gas and coal in vicinity; rly. workshops, foundry and machine shops, flour mills. Pop. 16,000.

Par'sonstown. See **BIRR**.

Par'tick, part of Glasgow, Lanarkshire, Scotland, on R. Clyde; shipbuilding, brass foundries, cotton factories, flour mills. Pop. (par.) 14,500.

Partinico (*pār-tē-nē-kō*), tn., Sicily,

15 m. W.S.W. of Palermo; silk and woollen goods. Pop. 24,000.

Passade na, city, California, U.S.A., 10 m. N.N.E. of Los Angeles; fruit packing and canning; Mt. Wilson with solar observatory (alt. 5,900 ft.), and Echo Mt. with Lowe Observatory. Pop. 76,000.

Pasco. See **CERRO DE PASCO**.

Pas-de-Calais (*pā-dē-kā-lā*), maritime dep., N. France; surface generally flat; very fertile; extensive coalfields and iron mines; large agricultural production; live-stock, poultry, and fishing; beet-sugar refining, distilling; glass, paper, pottery, leather manufactures. In Great War dep. suffered severely. Cap. Arras. Area, 2,606 sq. m. Pop. 1,172,000.

Pas'sage West, port, Cork, I.F.S., 7 m. S.E. of Cork, on Cork Harbour. Pop. 2,000.

Passaic (*pā-sā'ik*). (1) City, New Jersey, U.S.A., 5 m. N. of Newark; manufactures worsteds, cotton, silk, and rubber goods; submarine cables. Pop. 63,000. (2) Riv., New Jersey, U.S.A.; rises near Morristown, and flows N.E. and S. to Newark Bay; abundant water-power afforded by falls (70 ft.) at Paterson. Length, c. 100 m.

Passau (*pā'sou*), frontier tn., Bavaria, Germany, at junction of Inn and Danube rvs.; tobacco, leather, china, paper, and graphite industries; breweries; tourist centre. Pop. 24,500.

Pas'to, tn., Colombia, S. America, near boundary of Ecuador; at foot of volcano of same name (14,000 ft.); woollen goods; gold mines in vicinity. Pop. 30,000.

Pasuruan', chief tn., residency of same name, Java, Dutch E. Indies; 30 m. S.S.E. of Surabaya; sugar. Pop. 25,000.

Patago'nia, extensive region, S. Argentine and Chile, S. America; stretches from Rio Negro on N. to Straits of Magellan on S., and divided by Andes. Discovered by Magellan in 1520; Patagonians (now almost

extinct) are very tall and uncivilized. Portion *e.* of Andes, belonging to Argentina, consists of vast plateau region; in hollows lakes are frequent; chief rvs. are Rio Negro, Chubut, Chico, and Santa Cruz; most fertile and productive country is at base of Andes; gold, silver, copper, lead, coal found, but not worked; large tracts devoted to rearing of sheep, horses, and cattle. Area, *c.* 330,000 sq. m.; pop. *c.* 150,000. To *w.* of Andes is Chilean Patagonia, strip of rugged mountainous country with luxuriant forests; cattle in *n.* Area, *c.* 128,000 sq. m.; pop. *c.* 800,000.

Patan'. (1) Tn., Nepal, India, 4 m. *s.* of Katmandu; has several fine old temples. Pop. *c.* 30,000. (2) Walled tn., Baroda, Bombay, India, 64 m. *n.w.* of Ahmadabad; manufactures swords and spears; trades in silk and cotton goods. Pop. 32,000.

Pateley Bridge, mkt. tn., W. Riding, Yorks, England, on R. Nidd, 10 m. *n.w.* of Harrogate; lead mines, stone quarries; cattle and sheep fairs; stalactite caverns in vicinity. Pop. (rural dist.) 7,100.

Pater'no, tn., Sicily, on *s.w.* slope of Mt. Etna; mineral springs; olive oil and wine produced. Pop. 34,000.

Pat'erson, city, New Jersey, U.S.A., at falls of Passaic R.; chief centre of silk manufacture in U.S.A.; foundry and machine-shop products. Pop. 138,000.

Patial'a. (1) Indian state, Punjab, India; valuable forests of pine, oak, bamboo; slate, limestone, sandstone quarried; copper and lead mined; cotton, tobacco. Area, 5,932 sq. m.; pop. 1,500,000. (2) Cap. of above, 120 m. *n.w.* of Meerut; centre of local trade. Pop. 47,500.

Pat'mos, isl., Sporades group, Aegean Sea, belongs to Italy; here, according to tradition, St. John wrote the Apocalypse. Area, 12 sq. m.; pop. 4,500.

Pat'na. (1) Cap., Bihar and Orissa, India, on R. Ganges; univ.; rice, opium, indigo, cotton, salt, oil-seeds. Pop. 120,000. (2) Indian state, Bihar

and Orissa, India; flat; watered by R. Mahanadi; wheat, tobacco. Cap. Bolangir. Area, 2,399 sq. m.; pop. 495,000.

Patras', port, Greece, on *n.* coast of Morea; exports currants, wine, olive oil. Pop. 61,500.

Pat'ricott, tn., Lancs, England, 5 m. *w.* of Manchester; ironworks, cotton mills. Pop. 18,000.

Pat'erdale, vil., Westmorland, England, at *s.* end of Ullswater; tourist resort. Pop. 1,000.

Paturages (*pā-tōo-nizh'*), tn., Belgium, 4 m. *s.w.* of Mons; coal mines; steam engines. Pop. 10,000.

Pau (*pō*), tn., Basses-Pyrénées, France, on Gave-de-Pau, trib. of R. Adour; fine castle (14th cent.); winter health resort; linen, chocolate, hams, wine. Pop. 34,000.

Paul, par. and tn., Cornwall, England, 2 m. *s.* of Penzance; fisheries. Pop. (par.) 5,800.

Paumotu Islands. See TUAMOTU.

Pavia (*pā-vē'a*), tn., Lombardy, Italy, on R. Ticino, 20 m. *s.* of Milan; univ. (1361), and 5 m. *n.* is Certosa di Pavia (Carthusian monastery); Francis I. of France defeated here and captured by Charles V. (1525); iron foundries, chemicals. Pop. (comm.) 42,000.

Pav'lovo, town, Nijni-Novgorod, Russia, on R. Oka; iron and steel foundries; cutlery. Pop. 16,500.

Pawtuck'et, city, Rhode I., U.S.A.; manufactures cotton and silk fabrics, machinery, chemicals; first cotton-spinning works in U.S.A. established here (1790). Pop. 77,000.

Paysandu (*pī-sān-doo'*). (1) W. dep., Uruguay, S. America; traversed by Uruguay R.; stock raising. Area, 5,115 sq. m.; pop. 67,500. (2) Cap. of above, on Uruguay R.; important riv. port; exports preserved meat, cattle, sheep, hides, wool. Pop. *c.* 26,000.

Pea'body, city, Massachusetts, U.S.A., 2 m. *w.* of Salem; manufactures leather, machinery, and electrical supplies. Pop. 21,000.

Peace, riv., *w.* Canada; rises in

British Columbia; breaks through Rocky Mts.; flows N.E. to join Slave R. near Lake Athabasca; large area of basin well suited for grain growing; dist. linked by rail to Edmonton.

Peacehaven, seaside garden city, Sussex, England, 6½ m. E. of Brighton. Pop. 5,000.

Peak, TIRE, hill dist., Derbyshire, England; s. extremity of Pennine Chain; highest point, Kinder Scout (2,088 ft.); ruins of Peveril Castle in vicinity.

Pearl Harbour, port, Oahu, Hawaiian Islands, 6 m. W. of Honolulu; landlocked harbour, with narrow entrance guarded by coral reef; U.S.A. coaling and naval station.

Pearl River. See CANTON (3).

Pec (*pech*), formerly IPEK, tn., Montenegro, Yugoslavia, 90 m. S.W. of Nish; fruit, tobacco; silk. Centre for Serbian refugees during Great War. Pop. 15,000.

Pechili. See HOPEH.

Pechili, GULF OF. See POHAI.

Pechora (*pye-cho'ra*), riv., N.E. Russia; rises in Ural Mts.; flows N., S.W., and N. to enter Gulf of Pechora by a delta; length, 1,000 m., 700 m. navigable; basin forested.

Pécs (*páck*), formerly FÜNKIRCHEN, tn., Hungary, 110 m. S.W. of Budapest; univ.; leather, paper, cloth, and pottery. Pop. 47,500.

Pe'bles, co. tn., Peeblesshire, Scotland, on R. Tweed; tweeds and woollens; tourist resort. Pop. 5,900.

Pe'blesshire, or TWEEDDALE, inland co., Scotland; bordered N. by Midlothian, W. by Lanarkshire, S. by Dumfriesshire, E. by Selkirkshire; drained by R. Tweed; country rough and hilly, rising to 2,754 ft. (Broad Law); sheep farming; manufacture of woollen goods. Co. tn., Peebles. Area, 348 sq. m.; pop. 15,100.

Peek's kill, tn., New York, U.S.A., on Hudson R.; ironworks; boilers, stoves, bricks. Pop. 17,500.

Peel, wat.-pl., Isle of Man; fishing; bathing resort; ruins of castle. Pop. 3,000.

Pegs'wood, par. and vil., Northumberland, England, 2 m. N.E. of Morpeth; coal mines. Pop. (par.) 3,000.

Pegu (*pe-goo'*), cap. Pegu dist., Lower Burma, India, on Pegu R.; rice is chief product; large pagoda (320 ft. high); captured by British (1852). Pop. 19,000.

Pei-ho (*pá-hó'*), riv., Hopeh, China; rises on slopes of Mongolian Mts., near Great Wall, flows S.E. to enter Gulf of Pohai, near Taku forts; navigable by steamer to Tientsin, and by boat to Tungchau. Length, 285 m.; connected by canal with Hwang Ho and Yangtze Kiang.

Peine (*pī-nē*), tn., Hanover, Prussia, Germany, 20 m. E.S.E. of Hanover; iron industries; manufactures sugar and jute. Pop. 17,000.

Peiping. See PEKING.

Peipus (*pī-poos*), lake between S.W. Russia, and Estonia; s. part known as Pskov L.; drains to Gulf of Finland by R. Narova; important fisheries. Area, 1,356 sq. m.

Peking, or PEIPING, former cap. China; between Pei-ho and Hun-ho rivs., Hopeh prov.; consists of two cities, each surrounded by high walls; Tatar or Manchu city in N. includes old Imperial City and Forbidden City, with palaces and parks; Chinese city on S. has Temple of Heaven with Altar of Agriculture. Cap. transferred to Nanking in 1928, when Peking became Peiping. Pop. 1,298,000.

Pei'le (*pe-lá'*), MONT. active volcano, Martinique, French W. Indies; in 1902 tn. of St. Pierre was destroyed; alt. c. 4,400 ft.

Pelew Islands. See PALAU.

Pe'lon, mountain, Magnesia, E. Thessaly, Greece; celebrated in Greek mythology; modern Plessidi is chief summit (5,308 ft.).

Peloponnesus, ancient name of peninsula forming S. part of Greece; the modern Morea.

Pelo'tas, city, Rio Grande do Sul, S. Brazil; trade in cattle; meat-preserving works. Pop. 40,000.

Pem'ba, isl. off E. coast of Africa; N. of Zanzibar and part of Zanzibar

Protectorate; coral formation; very fertile; produces cloves, coconuts, rubber; wireless station. Area, 380 sq. m.; pop. 88,000.

Pembroke. (1) Chief tn., Pembroke-shire, Wales; mediæval castle; remains of Monkton Priory; Pembroke Dock, 2 m. distant, is naval dockyard. Pop. 12,000. (2) Tn., Ontario, Canada, on R. Ottawa, 75 m. n.w. of Ottawa. Pop. 9,300.

Pembroke-shire, most westerly co., Wales; bounded n., w., and s. by sea, e. by Cardigan and Carmarthen. Coast is wild and rugged; chief inlets, Milford Haven and St. Bride's Bay; includes several coastal islands; chief riv., Teifi; inland are fertile hills and valleys; chief industry, stock raising; deep-sea fishing; coal, lead, iron, zinc, and slate worked. Owing to settlement of Flemings (12th cent.), who adopted Eng. language, pop. is mostly English-speaking. Chief tns., Pembroke (co. tn.), Haverfordwest, and Tenby. Area, 614 sq. m.; pop. 87,200.

Penang', isl., n. of Straits of Malacca, off w. coast of Malay Pen.; with prov. of Wellesley and the Dindings (on mainland) it forms one of Brit. Straits Settlements; surface generally flat; coconuts and rice grown; exports pepper and other spices, betel nuts, sugar, rattans. Cap. Georgetown. Area, 108 sq. m.; pop. 304,500.

Penarth', port, wat.-pl., Glamorgan-shire, Wales, on Bristol Channel; exports iron and coal. Pop. 17,700.

Pen'dleton, suburb of Salford, Lancs, England; manufactures silk and cotton. Pop. 32,000.

Penze (*penj*), urb. dist., Kent, England; part of Greater London; contains Crystal Palace. Pop. 27,800.

Penicuik (*pen'e-hook*), tn., Midlothian, Scotland, 10 m. s. of Edinburgh; paper mills. Pop. 2,800.

Pen'istone, urb. dist., mkt. tn., W. Riding, Yorks, England, on R. Don, 12½ m. n.w. of Sheffield; steel works and coal mines. Pop. 3,300.

Penk'ridge, par. and tn., Staffs,

England, 6 m. s. of Stafford; coal mines. Pop. (par.) 2,600.

Penmaenmawr (*pen-mā'en-mawr*), wat.-pl., n. coast, Carnarvonshire, Wales, 4½ m. s.w. of Conway; to w. rises Penmaenmawr, with quarries and prehistoric remains. Pop. 4,000.

Penn, UPPER and LOWER, two pars. and vil., Staffs, England, 2 m. s.w. of Wolverhampton; hardware. Pop. (Upper) 5,500, (Lower) 400.

Pen'ine Alps. See ALPS.

Pen'ine Chain, range of mts., England, extending n. and s. from R. Tyne in Northumberland to Derbyshire and Staffs.; called the 'backbone of England'; summits include Cross Fell (2,930 ft.), Mickie Fell (2,591 ft.), Whernside (2,414 ft.), Ingleborough (2,373 ft.), Penyghent (2,273 ft.), and Kinder Scout (2,088 ft.).

Pennsylvania, Atlantic State, U.S.A., one of the thirteen colonies, and an original state; surface rolling in s.e.; drained mainly by the Delaware and Susquehanna rivs.; farther n. and w. rise Appalachian Mts.; Alleghany plateau slopes n.w.; w. contains Allegheny and Monongahela rivs., which unite at Pittsburgh to form R. Ohio. The most important mineral-producing state in U.S.A.; contains much bituminous coal, and almost the only deposits of anthracite in the country; in w. petroleum and natural gas are abundant and iron ore is found. Principal crops: maize, oats, wheat, rye, buck-wheat, and tobacco. Most important state for manufacture of iron and steel; other industries: manufacture of textiles, foundry and machine-shop products, cars, leather, flour, sugar and molasses refining, lumber, petroleum refining, and tobacco. Iron smelting is carried on mainly in and around Pittsburgh. Chief tns., Philadelphia, Pittsburgh, Scranton, Reading, Erie, and Harrisburg (cap.). Area, 45,126 sq. m.; pop. 9,854,000.

Pen rhyn (*-rin*). (1) Dist. near Bangor, Carnarvonshire, Wales; slate quarries, largest in Wales (5 m.

s.s.e. of Bethesda); on coast is Port Penrhyn, shipping point for slates. (2) Or TONGAREVA, isl., S. Pacific Ocean; c. 1,650 m. E.N.E. of Fiji group; annexed to New Zealand (1901). Pop. 400.

Pen'rith. (1) Tn., Cumberland, England; agricultural centre, on borders of Lake District. Pop. 9,100. (2) Munic. township, New South Wales, Australia, 34 m. w. of Sydney. Pop. 3,500.

Penryn (*pen-rin'*), mkt. tn., port, Cornwall, England, 3½ m. s.w. of Falmouth; granite; chemicals. Pop. 3,400.

Pensacola, city and port, N.W. Florida, U.S.A., on Pensacola Bay, near boundary of Alabama; fine land-locked harbour; naval air station; trade in timber, fish, naval stores, tallow, hides, wool, cotton, and fertilizers; paper, cotton-seed oil, and lumber mills. Pop. 32,000.

Penshurst, vil., Kent, England, 4 m. s.w. of Tonbridge; Sir Philip Sidney born at Penshurst Place (1554). Pop. 1,500.

Pensnett, tn., Staffs, England, 2 m. s.w. of Dudley; coal mines, iron-works; glass. Pop. 6,000.

Pentland Firth, strait between Orkney Islands and Caithness, Scotland; 14 m. long, 6 m. to 8 m. broad; has rapid tidal currents and dangerous whirlpools. Pentland Skerries, 4 m. N.E. of Duncansby Head, comprise several islets or rocks.

Pentland Hills, range running s.w. through cos. of Midlothian, Peebles, and Lanark, Scotland; length, 16 m.; breadth, 4 m. to 6 m.; summits, Scald Law (1,898 ft.) and Carnethy (1,890 ft.); contain several reservoirs of Edinburgh water supply. At Rullion Green, on N.E. side, Covenanters were routed (1666).

Pen'tyre, par. and vil., Glamorgan-shire, Wales, 7 m. s.w. of Cardiff; coal mines and ironworks. Pop. (par.) 2,500.

Penygroes, vil., Carnarvon, Wales, 7 m. s. of Carnarvon; slate trade. Pop. 2,700.

Pen'za. (1) Prov., central Russia; watered by tribs. of Rs. Don and Volga; produces grain; sawmills; manufactures leather and woollens. Area, 18,500 sq. m.; pop. 2,210,000. (2) Chief tn. of above, c. 350 m. s.e. of Moscow; at junction of Sura and Penza rivs.; paper and timber mills; soap, candles, cloth. Pop. 91,500.

Penzance, port, Cornwall, England, on Mount's Bay; mild climate; health resort and bathing place; exports fish, early vegetables and flowers; near town are tin-smelting works. Pop. 11,300.

Peoria (*pé-ô-ré-a*), city, Illinois, U.S.A., 130 m. s.w. of Chicago; riv. port; manufactures agricultural implements, starch, and glucose; stock-yards; trades in grain. Pop. 105,000.

Perak (*pá-rá*), Federated Malay State, in N.W. Malay Peninsula, drained by Perak R. and other streams; much dense forest; produces tin, sugar, rice, rubber, copper, ramie. Cap. Taiping. Area, 7,800 sq. m.; pop. 600,000.

Pergamos. See BERGAMA.

Périgueux (*pá-ré-goo'*), chief tn., Dordogne, France, 80 m. E.N.E. of Bordeaux; Roman remains; famous for its *pâtés de foie gras* and truffled partridge; china ware, iron, and woollens. Pop. 30,500.

Perim (*pá-rém*), isl., Strait of Babel-Mandeb, s. end of Red Sea; Brit. coaling and cable station. Area, 5 sq. m.; pop. c. 200.

Perlis, Unfederated Malay State, in N.W. of Malay Peninsula; drained by R. Perlis; produces rice, tin, coconuts, guano. Cap. Kangar. Area, 316 sq. m.; pop. 40,000.

Perm. (1) Dist., Ural Area, U.S.S.R.; consists of hilly central zone (Urals), E. plain, and W. region of rolling downs; drained by R. Kama; forests; agriculture backward; rich in minerals (gold, silver, copper, iron, lead, platinum, nickel, manganese, coal, salt, etc.); many and varied industries. (2) Chief tn. of above; port on Kama R.; sawmills, tanneries, brick

fields, machinery; centre of transit trade across Urals. Pop. 85,000.

Pernambuco (*per-nim-boo'kō*). (1) State, Brazil, on Atlantic coast; mountainous interior; coast lands produce sugar-cane and fruits; cotton, coffee, tobacco grown on slopes. Cap. Recife. Area, 38,312 sq. m.; pop. 2,155,000. (2) See **RECIFE**.

Pernau. See **PARNU**.

Péronne (*pā-ron'*), tn., Somme, France, 22 m. s.s.w. of Cambrai. Changed hands several times during Great War. Pop. 4,000.

Perpignan (*per-pên-yân*), cap. Pyrénées-Orientales, France, 34 m. s. of Narbonne; trades in wine, brandy, silk, and wool. Pop. 57,500.

Perranporth, vil., Cornwall, England, 7½ m. n.w. of Truro; pilchard fishing; seaside resort. Pop. 2,380.

Per shore, tn., Worcestershire, England, 8 m. s.e. of Worcester; orchards; jam factories; agricultural implements. Pop. 4,000.

Persia, kingdom, s.w. Asia; bounded n. by Azerbaijan, Caspian Sea, Armenia, and Turkmen rep., e. by Afghanistan and Baluchistan, s. by Gulf of Oman and Persian Gulf, and w. by Mesopotamia and Asia Minor. In n. are Elburz Mts. (Demavend, 18,600 ft.); along s.w. are Zagros Mts.; in centre and w. is dry, barren plateau of Iran (6,000 to 8,500 ft.); dist. s.e. of Tehran includes Dasht-i-Kavir or Great Salt Desert and Dasht-i-Lut, covered with thin deposits of salt; more than half the entire area is drained towards interior to salt marshes or lakes, more than one-fourth to inland seas and lakes (Caspian, Aral, etc.), less than a quarter to the open sea; chief riv. of s. is the Karun, flowing to the Shatt-al-Arab. Climate on plateaus is continental; in s.e., winter and spring are temperate, summer warm, autumn oppressively hot; rainfall is 5 to 10 in. on the plateaus, and occurs mostly in winter; snow of hills provides summer supply of water, used for irrigation; vegetation luxuriant on coast, where roses grow in great profusion;

date palm widely spread; forest dist. mainly confined to n. slope of Elburz; Mediterranean fruits, rice, cotton, tobacco, opium poppy, and cereals are found; oil is worked by Anglo-Persian Oil Co. Hand manufacture of carpets, shawls, silk, cotton, leather, copper, brassware, enamelled work, pottery, glazed tiles, and attar of roses; trade in pearls and pearl-shell. Of the inhabitants c. one-third are nomads, the chief nomadic tribes being Turks, Kurds, Leks, Arabs, Lurs, Baluchis, and gipsies. Chief tns., Tehran (cap.), Tabriz, Isfahan, Meshed, Resht, Kerman, and Shiraz; principal ports are Bandar Abbas, Bushire, and Mohammerah on Persian Gulf, Barfrush, Pahlevi, and Meshed-i-Sar on Caspian Sea. Area, 628,000 sq. m.; pop. c. 10,000,000.

Persian Gulf, inlet of Arabian Sea, running n.w. from Strait of Ormuz between Persia and Arabia; shores sterile; Shatt-al-Arab and Karun R. enter head of gulf; Bahrein, Qishm, and Ormuz are chief islands; Bushire chief port; Gulf is in Brit. sphere of influence. Area, c. 95,000 sq. m.

Perth. (1) Royal burgh, co. tn., Perthshire, Scotland, on R. Tay; the 'Fair City'; till assassination of James I. (1437) the cap. of Scotland; Scone Palace 2 m. distant; 13th cent. church of St. John (restored as War Memorial, 1928); dye works, cattle markets; industries also include linen, iron, carpets, glass, and ink; salmon fisheries in Tay. Pop. 34,800. (2) Tn., cap. W. Australia, on Swan R., 12 m. above its port Fremantle; observatory; univ. (1913); racecourses. Pop. (with suburbs), 185,000.

Perth Amboy, city, New Jersey, U.S.A., on Raritan Bay, 20 m. s.w. of New York; shipyards and dry docks; terra-cotta, lead, copper, steel, emery, and chemicals; coal is shipped. Pop. 44,000.

Perthshire, co., Scotland; bounded by Inverness, Aberdeen, Angus, Fife, Kinross, Clackmannan, Stirling, Dumfries, and Argyll; famed for mountain and loch scenery; in w. and n.

is Grampian plateau (peaks: Ben More, Ben Lawers, Schiehallion, Ben-y-Gloe); to s.e. and s. are Sidlaw and Ochil Hills; Trossachs and Pass of Killiecrankie are in co.; R. Tay (tribs. Garry, Tummel, Earn, etc.) drains almost whole co.; s. watered by Forth and Teith; lochs are Tay, Earn, Rannoch, Katrine, Vennachar, and Achray. Roman camps and standing stones; cathedrals at Dunblane and Dunkeld; palace at Scone. Agriculture, sheep farming, fruit growing; deer forests; coal and iron in the Ochils; distilling; woollen, cotton, and linen industries. Chief tns., Perth, Crieff, Blairgowrie, and Dunblane. Area, 2,494 sq. m.; pop. 120,800.

Peru (*pe-roo'*). (1) Rep., S. America; bounded n. by Ecuador and Colombia, e. by Brazil and Bolivia, s. by Chile, w. by Pacific Ocean; a narrow coastal strip rises sharply to the Andes (width c. 250 m.) running parallel with coast and having great fertile valleys and tablelands; many volcanic peaks over 19,000 ft.; plateaus attain alt. of 12,000 to 13,000 ft. above sea-level. To e. is region of forest and savanna sloping to Amazon basin and drained by headwaters of Amazon (Marañon and Ucayali); in extreme s.e. is L. Titicaca, largest lake in S. America (alt. 12,466 ft.). Climate varies with elevation; average annual temperature on coast, 65° to 75° F.; on tablelands, 40° to 60° F.; in e. dists., 70° to 80° F.; rainfall heaviest in e., coastal strip on w. practically rainless. Mineral resources enormous, but difficulty of transport has arrested development; silver occurs in vast quantities, and copper, lead, petroleum, and silver are worked; guano from the coastal islands is important; forests of e. slopes produce valuable timber, in addition to cinchona, coca, cacao, and balata; chief agricultural products are sugar, cotton, coffee, wool, hides and skins; tobacco, wheat, rice, maize, olives, and fruits are grown; llamas and cattle are raised. Exports include

petroleum, sugar, silver, cotton, wool, copper. Majority of pop. are Indians; whites, chiefly Spanish, form c. one-seventh. Cap. Lima; chief port, Callao. Area, 532,047 sq. m.; pop. c. 6,150,000. (2) City, Indiana, U.S.A., on Wabash R., 70 m. n. of Indianapolis; furniture, basket-ware, electrical appliances; rly. workshops; grain. Pop. 12,500. (3) City, Illinois, U.S.A., 85 m. s.w. of Chicago; coal mining; zinc. Pop. 10,000.

Perugia (*pe-roo'jā*), tn., Umbria, Italy, on R. Tiber, 126 m. by rail n. of Rome; univ. (founded 1308); observatory; woollens, silks, liqueurs. Pop. 73,000.

Pesaro (*pes'ā-rō*), tn., Italy, on Adriatic Sea, 37 m. n.w. of Ancona; wat.-pl.; exports figs, wine, oil, silk, soap, wax, lead, and iron. Pop. 30,000.

Pescado'ra, or **BOKOTO**, group of islands w. of Formosa, China Sea; belong to Japan; fish, ground-nuts, rice, millet. Pop. c. 70,000.

Pescla (*pes'hā*), tn., Tuscany, Italy, 30 m. n.w. of Florence; silk, olive oil, paper, leather. Pop. 18,000.

Peshawar, cap., N.W. Frontier prov., India; on Khyber Pass rly.; commands caravan route between Afghanistan and India; military station. Pop. 104,500.

Petchora. See **PECHORA**.

Peterborough. (1) City, Northants, England, on R. Nen; rly. centre; cathedral; agricultural produce, bricks; rly. workshops. Pop. 43,600.

(2) Tn., Ontario, Canada, 69 m. n.e. of Toronto; rly. jn.; electrical machinery, flour, lumber; woollen mills. Pop. 21,000. (3) **SOKE OF**, administrative county, N.E. Northants, England. Area, 84 sq. m.; pop. 51,800.

Peterhead, port, Aberdeenshire, Scotland, 44 m. n.e. of Aberdeen; herring and other fisheries; red granite quarries and polishing works; convict station. Pop. 12,500.

Peterhof, tn., Russia, on Gulf of Finland, 19 m. s.w. of Leningrad; gem cutting; agricultural imple-

ments; great palace of Peter I. (1720). Pop. 9,000.

Petersburg, city, Virginia, U.S.A., 22 m. s. of Richmond, at head of navigation of Appomattox R.; accessible to coastwise steamers; manufactures tobacco and trunks; exports peanuts, tobacco, and cotton. Pop. 28,000.

Petersfield, mkt. tn., Hants, England, 19 m. N.E. of Portsmouth; church of St. Peter. Pop. 4,400.

Petra, anc. tn., Trans-Jordan, w. Asia, in rift valley midway between Dead Sea and Gulf of Aqaba; formerly important caravan centre; temples and rock tombs; Roman ruins.

Petrograd. See Leningrad.

Petropavlovsk'. (1) Tn., Kazak rep., U.S.S.R., on Trans-Siberian Rly. and R. Ishim; caravan trade in steppe products (cattle, wool, etc.). Pop. 44,500. (2) Port, s.e. Kamchatka Peninsula, Siberia; exports furs. Pop. 2,000.

Petropolis, city, health resort, Brazil, 28 m. N. of Rio de Janeiro; alt. 2,600 ft.; cotton goods, beer, cheese, cigars. Pop. 68,000.

Petrovaradin, fortified town, E. Slavonia, Yugoslavia, on R. Danube, opposite Novi Sad; Peter the Hermit assembled first crusade here in 1096. Pop. 5,000.

Petrovsk, town, Saratov prov., Russia, 60 m. N.N.W. of Saratov city; tanneries, distilleries, flour mills, oil works. Pop. 19,500.

Petrozavodsk, chief tn. and lake port, Karelia, N.W. Russia, on w. shore of L. Onega; cannon foundry; gunpowder; tanneries, brick works; iron and copper ware. Pop. 26,500.

Petworth, par. and mkt. tn., W. Sussex, England, 17 m. s. of Guildford; building-stone quarries near. Pop. (par.) 8,400.

Pewsey, vil. and par., Sussex, England, 4 m. N.E. of Eastbourne; one of Cinque ports; landing-place of William the Conqueror. Pop. (par.) 770.

Plorshheim (*pforts'him*), tn., Baden,

Germany, 16 m. S.E. of Karlsruhe; gold and silver ornaments, chemicals, paper, leather, and machinery. Pop. 79,000.

Philadelphia, cap. of Pennsylvania, U.S.A.; between Delaware R. and its trib. the Schuylkill; univ.; 10 m. W.N.W. is Women's Coll. of Bryn Mawr; foundry and machine-shop products; shipbuilding; locomotives; carpets, rugs, and clothing; refining of sugar, molasses, and petroleum; exports: petroleum, maize, coal, meat, cattle, wheat, and flour; port extends along 20 m. of Delaware front. City founded by William Penn in 1682; Declaration of Independence adopted here (1776); cap. of Union (1790-1800). Pop. 1,964,000.

Philae (*fe'la*), isl. in R. Nile, Egypt, above Aswan Dam; has interesting temples and other buildings, of which most notable are great columned hall known as 'Pharaoh's bed,' and temple of Isis; buildings usually submerged by waters of the Dam.

Philippeville (*fe'lep-vil'*), port, N. Algeria, Africa, 50 m. N.N.E. of Constantine; exports wine, sheep, cattle, cereals, esparto grass, minerals, and cork. Pop. 29,500.

Philippine Islands, group of over 7,000 islands, Pacific Ocean, off S.E. Asia; bounded N. and W. by China Sea, E. by Pacific, S. by Celebes Sea; connected by submarine ridge with Borneo and Celebes; largest islands, Luzon in N., Mindanao in S., Mindoro, Samar, Leyte, Cebu, Negros, Panay in centre, and Palawan in W.; coral reefs, especially on E.; traversed by high mt. ranges (mostly volcanic); highest peak, Mt. Apo (10,312 ft.) on Mindanao; twelve active and several extinct volcanoes; subject to frequent earthquakes, heavy rains, and typhoons; climate fairly healthy. Vegetation luxuriant; immense forests of valuable timber; fauna includes buffalo, boar, deer, antelope, water-buffalo (caraboa); numerous birds, bats, reptiles, sea and land turtles; fish abundant; chief exports: sugar, hemp, rice, tobacco,

copra, coconut oil, cigars, timber, edible birds' nests; gold mined; pearl fisheries; trade mainly with U.S.A., Japan, Britain, and China; rlys. (789 m.) on Luzon, Panay, and Cebu. Islands were discovered by Magellan (1521); named (1543) in honour of Philip II.; ceded by Spain to U.S.A. (1898). Natives are mostly of Malayan origin. Principal tns., Manila (cap.), Cebu, and Iloilo. Area, 114,400 sq. m.; pop. 10,314,500.

Philippopolis, tn., Bulgaria, 97 m. w.n.w. of Adrianople, on R. Maritsa; on fertile plain producing wheat, grapes, mulberries; silks, woollens, leather, and tobacco. Pop. 85,000.

Phillack, urban dist., Cornwall, England, on St. Ives Bay, 8 m. n.e. of Penzance; ironworks. Pop. 3,200.

Phillipsburg, tn., New Jersey, U.S.A., on Delaware R., 53 m. n. of Philadelphia; water power; foundry and machine-shop products, mining machinery and tools; rly. workshops; silk and pulp mills. Pop. 19,500.

Phoenicia (*fe-nish'i-a*), anc. country bordering e. shores of Levant; most important cities, Tyre and Sidon.

Phoenix (*fe'niks*), cap. Arizona, U.S.A., 100 m. n.e. of Tucson; winter resort; cotton, lucerne, fruits, and vegetables; trade in fruit, live-stock, and minerals. Pop. 48,000.

Phoenix Group (*fe'niks*), eight small Brit. islands in w. Pacific Ocean, c. 1,200 m. n.e. of Fiji. Area, 16 sq. m.; pop. 60.

Phoenixville (*fe'niks-*), tn., Pennsylvania, U.S.A., at mouth of French Creek, 28 m. n.w. of Philadelphia; iron mills, blast furnaces, bridge and boiler works; graphite and plumbago in vicinity. Pop. 12,000.

Phrygia (*frij'i-a*), anc. country, Asia Minor; celebrated for marble, vines, and wool; now comprised in vilayets of Brusa, Konia, and Aidin.

Piacenza (*pe-a-chen'sa*), tn., Italy, near R. Po, 92 m. n.w. of Bologna; cathedral; Palazzo Farnese and other palaces; agricultural mkt.; motor cars. Pop. 62,000.

Piatra (*pya'tra*), tn., Moldavia,

Romania, near e. foot of Carpathians; summer resort; textiles; timber trade. Pop. 26,000.

Piahy (*pe-ou-e'*), state, n.e. Brazil; R. Parnahyba forms w. boundary; cattle grazing; cotton, sugar, tobacco, rubber, wax, and dyewoods; silver, iron, lead. Cap. Therezina. Area, 116,494 sq. m.; pop. 785,500.

Piave (*pe-a've*), riv. rising in Carnic Alps, Treviso, n. Italy; below Belluno it runs s.w., then bends eastward, and flows to Porto di Cortellazzo on Adriatic Sea through marshy meadows intersected by canals. Length, 135 m. Scene of much fighting between Italians and Austrians during Great War.

Piazza Armerina (*pe-a'sa ar-ma-re'na*), tn., central Sicily, Italy; trades in oil, wine, and nuts; manufactures woollens. Pop. 38,500.

Picardy, old prov., n. France; now comprised in dep. of Somme and portions of Pas-de-Calais, Aisne, and Oise. Within it are mediaeval battlefields of Agincourt and Crécy, and Great War added those of the Aisne, Oise, Somme, Amiens, and St. Quentin.

Pickering, mkt. tn., N. Riding, Yorks, England, 22 m. n.e. of York; ruins of castle in which Richard II. was imprisoned (1399); agricultural implements. Pop. 3,700.

Pico (*pe'ko*), isl., Azores, Atlantic Ocean; fruit growing; has volcanic peak 7,600 ft. high. Chief tn. Lagens. Area, 175 sq. m.; pop. 25,000.

Pictou (*pik'too*), port, Nova Scotia, Canada, on n. side of Pictou Bay, 80 m. n.e. of Halifax; exports coal. Pop. 3,000.

Piedmont (*pea'mont*), dep., Italy, between Alps and Apennines; rice, wheat, maize, vines, fruits; silk, cotton, woollens. Area, 11,331 sq. m.; pop. 3,554,500.

Piedras Negras (*pe-a'dras na'gras*), formerly CIUDAD PORFIRIO DIAZ, tn., N. Mexico, on Rio Grande del Norte; frontier terminus of rly. that connects with U.S. line; stock raising, agriculture. Pop. 14,500.

Pietermaritzburg, or MARITZBURG,

cap. of Natal, S. Africa, 46 m. n.w. of Durban; founded by Boers (1839); govt. and educational buildings; agricultural show in June. Alt. 2,220 ft. Pop. 38,000 (Europeans, 20,000).

Pietersburg (*pē'ters-*), tn., N. Transvaal, S. Africa, 150 m. n. of Pretoria; alt. 4,269 ft.; gold, asbestos, tin, corundum; cereals, tobacco, ground-nuts, and cotton cultivated; oranges and lemons. Pop. 6,500 (2,500 whites).

Pike's Peak, mt., Rocky Mts., Colorado, U.S.A., 12 m. w. of Colorado Springs; cogwheel railway (8½ m.) to summit; meteorological station; alt. 14,108 ft.

Pilat's Moun't, peak, central Switzerland, at s.w. extremity of L. Lucerne; rack rly. to summit; alt. 6,998 ft.

Pilibhit (*pē-lē-bē'*), tn., United Prov., India, 31 m. n.e. of Bareilly; metal vessels; exports rice, borax, pepper, and sugar. Pop. 34,000.

Pillau (*pē'lou*), port and wat.-pl., E. Prussia, Germany; navigable channel to Königsberg (29 m.); shipbuilding; fishing. Pop. 7,000.

Pilsen, or **PLZEN**, tn., Bohemia, Czechoslovakia, 70 m. s.w. of Prague; famous for its beer (*Pilsener*); sugar, clothing, pottery, machinery, alum, furniture, hardware, spirits, leather, and paper. Pop. 88,500.

Pinar del Rio (*pē-nār' del rē'ō*). (1) Prov., w. Cuba; tobacco, rice, coffee, cotton, and fine woods. Area, 5,206 sq. m.; pop. 301,000. (2) Cap. of above; tobacco. Pop. 16,000.

Pindus, mt. chain, Greece; divides Thessaly from Epirus; greatest alt. 7,665 ft.

Pine Bluff, city, Arkansas, U.S.A., on Arkansas R.; cotton; vehicles. Pop. 20,000.

Pinerolo (*pē-nā-rō'lō*), city, Italy, 25 m. s.w. of Turin; cathedral; place of imprisonment of Man in the Iron Mask (1679-81); silk, cotton, woollens. Pop. 19,000.

Pir'ner, par. and vil., Middlesex, England, 2½ m. n.w. of Harrow; residential resort. Pop. (par.) 16,000.

Pinsk, tn., Poland, on trib. of R.

Pripet, 100 m. e. of Brest-Litovsk; extensive marshes in neighbourhood; potteries, tanneries, breweries, oil and soap works. Ceded to Poland (1920). Pop. 36,500.

Pir'ton, par. and vil., Derbyshire, England, 3 m. e. of Alfreton; coal mines. Pop. (par.) 5,350.

Piombino (*pē-om-bē'nō*), port, Tuscany, Italy; port for Elba; iron and tinplate. Pop. 24,000.

Piotrków (*pō'tr-kuf*), tn., Poland, 25 m. s. of Lodz; flour mills, timber, leather, agricultural machinery. Pop. 41,500.

Piqua (*pē'wā*), city, Ohio, U.S.A., 28 m. n. of Dayton; iron and furniture works; woollen goods, linseed oil, flour. Pop. 15,000.

Piræus (*pē-rē'us*), port, Greece, 5 m. s.w. of Athens; port of Athens and chief port of Greece; arsenal; exports wines, brandy, currants, marble, vinegar; flour and cotton mills, machinery, soap. Pop. 133,500.

Pirano (*pē-rā'no*), port, Istria, Italy, 12 m. s.w. of Trieste; salt works; wines and olives. Pop. 14,500.

Pir'massena, tn., Bavarian Palatinate, Germany, 43 m. s.w. of Mannheim; boots, shoes, leather goods, musical instruments. Pop. 43,000.

Pir'na, tn., Saxony, Germany, on R. Elbe; glass-blowing, tanning, and brewing; porcelain and enamelled ware. Pop. 30,500.

Pirot (*pē-rof*), tn., Serbia, Yugoslavia, 36 m. s.e. of Nish; cloth and carpets. Pop. 11,000.

Pisa (*pē-zā*). (1) Prov., Tuscany, Italy; produces wheat, oil, and wine; manufactures silk, cotton, linen goods, pottery, glass, soap, and candles; marble quarries; copper and coal mines. Area, 942 sq. m.; pop. 334,500. (2) Cap. of above, on R. Arno; 11th cent. Gothic cathedral of white marble; campanile, known as Leaning Tower (1174-1350), built entirely of marble, 178½ ft. high and over 16 ft. out of perpendicular; univ. founded in 14th cent.; birthplace of Galileo; silk, cotton, linen, coral, and alabaster work. Pop. 77,000.

Pisek (*pēs'ek*), tn., Bohemia, Czechoslovakia, 45 m. s.e. of Pilsen; breweries; iron and brass foundries. Pop. 16,000.

Pistols, or **Pistoria** (*pēs-tō'yā*), tn., Tuscany, Italy, 30 m. n.w. of Florence; was noted for pistols, which are said to have derived their name from tn.; iron and steel ware, glass, silk, paper, macaroni. Pop. 70,000.

Pitcairn', isl., centre of S. Pacific Ocean; produces sweet potatoes, bananas, sugar-cane, oranges, coconuts, coffee, and arrowroot; colonized by mutineers of the *Bounty* (1790); annexed by Great Britain (1839). Area, 2 sq. m.; pop. 175.

Pitesti (*pē-tesh'tē*), tn., Romania, on R. Argas, 65 m. w.n.w. of Bucharest; petroleum, salt; fruit, grain. Pop. 25,000.

Pitloch'ry, vil., Perthshire, Scotland, on R. Tummel, 25 m. n. of Perth; near Pass of Killiecrankie; tourist resort. Pop. 2,250.

Pittenweem', port and royal burgh, Fife, Scotland, on Firth of Forth; fishing and fish curing. Pop. 1,600.

Pitts'burg, city, s.e. Kansas, U.S.A.; in coal, lead, and zinc region; rly. works; bricks, tiles, sewer pipes, glass, meat packing. Pop. 18,000.

Pitts'burgh, city, Pennsylvania, U.S.A.; on Allegheny, Monongahela, and Ohio rivs.; headquarters of the U.S. Steel Corporation; in centre of richest coalfields in America, and largest distributing point for coal in U.S.A.; region also produces natural gas and petroleum; centre of extensive rly. system; great river traffic; iron and steel products of all kinds; glass, rolled brass and copper, foundry and machine-shop products, silver and nickel-plated ware, earthenware, tinplate, electrical machinery, bricks, carriages, and furniture; slaughtering and meat packing. Built by French (1754) and known as Fort Duquesne; afterwards called Fort Pitt. Pop. 645,000.

Pitts'field, city, Massachusetts, U.S.A., 150 m. w. of Boston; electrical goods, motor-cars, cotton and

woollen goods, boots and paper; winter resort and tourist centre. Pop. 50,000.

Pitts'ton, city, Pennsylvania, U.S.A., 11 m. s.w. of Scranton; coal mining; machinery, vulcanized iron, terracotta, paper, silk. Pop. 18,500.

Piura (*pē-oo'ra*). (1) Coast dep., n.w. Peru; partly desert and almost rainless; chief petroleum-producing dist. of Peru; cotton-seed and castor oil; valley lands irrigated. Area, 15,190 sq. m.; pop. c. 300,000. (2) Cap. of above; was first Spanish colony in country; petroleum and cotton. Pop. 15,000.

Plain'field, city, New Jersey, U.S.A.; residential suburb of New York. Pop. 34,000.

Plaistow (*plas'tō*), part of co. bor. of W. Ham, Essex, England; industrial area. Pop. 58,500.

Plas'sey, vil., Bengal, India, 80 m. n. of Calcutta; scene of Clive's victory over Suraj-ud-Dowlah (1757).

Plata (*plā'tā*), RIO DE LA, or RIVER PLATE, E. inlet, S. America, between Argentina and Uruguay, forming estuary of Paraná and Uruguay rivs.; width at mouth, c. 130 m.; length, c. 170 m.; of great commercial importance, but navigation hampered by shallowness.

Platts'burg, city, New York, U.S.A., on w. of Lake Champlain; tourist centre; wood-pulp, paper, typewriters. Pop. 13,500.

Plauen (*plou'en*), tn., s.w. Saxony, Germany; lace making and embroidery. Pop. 111,500.

Plenty, BAY OF, wide bend or bight, n.e. coast, North Island, New Zealand, contains several islands. Width, 130 miles.

Plev'na (Bulgarian *Pleven*), tn., Bulgaria, 57 m. n.w. of Trnovo; woollens, silks, wines, live-stock; captured by Russians from Turks after famous siege (1877). Pop. 29,000.

Plinlim'mon, or **PLYNIMMON**, mt. on border of Cardiganshire and Montgomeryshire, Wales; centre of great mt. group containing source of riv. Severn; alt. 2,468 ft.

Plock, or **PLOTSK** (*pwot'sk*), tn., Warsaw, Poland, on R. Vistula, 56 m. N. of Warsaw; exports grain, beet sugar, wool. Pop. 26,000.

Ploesti (*plô-yesh'ti*), tn., Romania, 36 m. N. of Bucharest; rly. jn.; on oilfield; tanneries and petroleum refineries. Pop. 57,500.

Plymouth (*plim'ith*). (1) Port and co. bor., Devon, England; at head of Plymouth Sound, between estuaries of Rs. Plym and Tamar; includes Stonehouse and Devonport, and constitutes with them the 'Three Towns'; citadel; on Hoe (esplanade overlooking Sound) is statue of Drake, Armada memorial, and tower of Smeaton's lighthouse. At Stonehouse are marine barracks, naval victualling yard, and naval hospital; Devonport contains important dockyards; fortified; important naval station; shipbuilding yards, foundries, starch works, flour and flax mills; manufactures include sailcloth, rope, and brushes; fishing. Among famous men connected with tn. are Drake, Raleigh, Hawkins, and Grenville. Pop. 208,200. (2) Tn., Massachusetts, U.S.A.; landing-place of Pilgrim Fathers (1620); cordage, hardware, cotton and woollen goods, and machinery. Pop. 13,000. (3) Tn., Pennsylvania, U.S.A., on R. Susquehanna; coal mines; silk. Pop. 17,000.

Plympton, tn., Devon, England, 4½ m. E. of Plymouth; consists of Plympton St. Mary and Plympton Erle; ruined castle; birthplace of Sir Joshua Reynolds. Pop. 5,000.

Pilsen. See PILSEN.

Pnom-Penh (*pnom-pen*), cap. of Cambodia, French Indo-China, on R. Mekong; rice, cotton, pepper, fish, tobacco. Pop. 83,000.

Po, riv., Italy; rises in Monte Viso (Cottian Alps), flows N.E. and E., through Piedmont and Lombardy, and enters Adriatic Sea by delta; length, 400 m.; navigable to Turin; chief tribs., Dora Riparia, Dora Baltea, Ticino, Adda, Mincio; enclosed by embankments from Piacenza to the sea.

Pocatello, city, S.E. Idaho, U.S.A.; alt. 4,460 ft.; rly. shops; cheese; irrigation farms. Pop. 16,000.

Pocklington, urb. dist. and mkt. tn., E. Riding, Yorks, England, 12 m. S.E. of York; corn mills; agricultural implements; brewing; important fairs. Pop. 2,600.

Podgorica, or **PODGORITSA** (*pod'gor-it-sa*), tn., Montenegro, Yugoslavia, 19 m. N.E. of Cetinje; tobacco; saw-mills. Pop. 9,000.

Pod'mokly (German *Bodenbach*), tn., Bohemia, Czechoslovakia, on R. Elbe; rly. jn.; textiles, chemicals, porcelain. Pop. 15,000.

Podol'sk, tn., Moscow province, Russia, 25 m. S. of Moscow; silks, cement. Pop. 19,500.

Pohai', formerly **CHIHLI**, Gulf of, N. arm of Yellow Sea, China; entered by STRAIT OF POHAI between Shantung and Liaoting peninsulas; receives waters of Hwang-Ho and Peiho; shallow.

Poitiers (*puv-tê-â'*), chief tn., Vienne, France, 60 m. S. of Tours; cathedral founded 1161 by Eleanor, queen of Henry II. of England; brewing; manufactures hosiery and cloth. Here Black Prince defeated French (1356). Pop. 41,000.

Poitou (*puv-too'*), old prov., W. France; comprises roughly modern depts. of Vienne, Deux-Sèvres, and La Vendée; appanage of Eng. crown at different periods from 12th to 14th cent.; chief tn., Poitiers.

Pola, fortified port, Istria, Italy, on Adriatic Sea; former Austrian naval station; during Great War major portion of Austrian fleet was shut up in Pola; occupied by Italians (Nov. 1918). Pop. 54,500.

Po'land, rep., E. Europe; bounded N. by Baltic Sea, Danzig, E. Prussia, and Lithuania, E. by Russia, S. by Romania and Czechoslovakia, W. by Germany; surface is plain, only highland being Tatra and Carpathian Mts. in S.; R. Vistula flows through rep.; climate is extreme; over 20 per cent. of surface forested; c. one half arable land; rye, oats, wheat, and barley

are chief cereals; potatoes, rye, and beetroot yield largest crops; cattle, sheep, swine, and horses reared. Among minerals are coal, iron, zinc, salt, petroleum, natural gas; industries include textiles, paper, chemicals, timber, oil, and sugar. Country was divided by successive partitions among Russia, Austria, and Prussia (1772, 1793, 1795), but reconstituted as a nation after the Great War. Chief tns., Warsaw (cap.), Lodz, Lwow, Poznan, Cracow, and Wilnan. Area, 149,958 sq. m.; pop. 27,177,000.

Polar Regions. See ARCTIC OCEAN and ANTARCTIC OCEAN.

Poldhu (*pol-dá'*), wireless station, Cornwall, England, on Mount's Bay, 5 m. s. of Helston.

Polesworth (*póls'worth*), par. and vil., Warwickshire, England, 8 m. n.w. of Nuneaton; collieries, quarries, and clay works. Pop. (par.) 6,300.

Pollokshaws, tn., incorporated in s.w. Glasgow, Scotland, on White Cart R.; cotton factories and iron foundries. Pop. 17,500.

Pol'lotak, tn., White Russia, U.S.S.R., at jn. of Polota and Dvina rvs.; cathedral; timber; flour. Pop. 21,500.

Pol'tav'a, tn., Ukraine, U.S.S.R., c. 88 m. w. of Kharkov; horses, cattle, and grain; flour mills, tobacco factories, and tanneries. Pop. 89,000.

Polynesia (*pol-i-nésh'ya*) ('many islands'), term generally applied to S. Pacific islands eastward of a line drawn from New Zealand through Samoa to Hawaii and extending from c. 120° to 180° w.

Pomerania, prov., Prussia, Germany; stretches along Baltic E. and w. of mouth of R. Oder; includes Rügen, Usedom, and Wollin islands; numerous small lakes; agriculture; fishing; shipbuilding. Cap. Stettin. Area, 11,664 sq. m.; pop. 1,879,000.

Pomfret. See PONTFREAT.

Pomona. (1) City, California, U.S.A., 32 m. E. of Los Angeles; residential and health resort; fruit and vegetables; fruit canning. Pop. 21,000. (2) See MAINLAND.

Pompeii (*pom-pā'ē*), ancient tn., Campania, Italy, at foot of Mt. Vesuvius, on Bay of Naples; for c. 160 years a prosperous Roman tn. and favourite seaside resort of upper classes; in A.D. 79 overwhelmed by volcanic ashes during eruption of Mt. Vesuvius; excavation begun in 1748, and steadily carried on since 1860; much of tn. now exposed to view.

Ponce (*pon'thā*), tn., Porto Rico, W. Indies; on s. coast; coffee, sugar, rum, molasses, and tobacco. Pop. 47,000.

Pondicherry (*pon-dī-she'r'i*), cap. French possessions, India, on E. coast, 100 m. s. of Madras; no harbour; rice and ground-nuts. First settled by French (1674); frequently taken by British, but finally restored to French (1816). Area (terr.), 115 sq. m.; pop. (tn.) 48,000, (terr.) 284,500.

Pon'doland, coastal dist., part of Transkeian Terrs., Cape Prov., S. Africa, bordering on Natal; progressive native reserve; forests; fine scenery. Area, c. 4,000 sq. m.; pop. 250,000.

Pon'ta Delgad'a, largest tn., Azores, on São Miguel; exports grain and fruit. Pop. 16,000.

Pont-à-Mousson (*pôn-tā-moo-sôn'*), tn., Meurthe-et-Moselle, France, on R. Moselle, 16 m. n.w. of Nancy; iron-works; paper; velvet. Pop. 11,000.

Pontarlier (*pôn-tār-lè-ā'*), tn., Doubs, France, on R. Doubs, 36 m. s.e. of Besançon; on main rly. route through Jura Mts. into Switzerland; liqueurs; watches and clocks. Pop. 11,000.

Pontefract, or **POMFRET**, tn., W. Riding, Yorks, England, 14 m. s.e. of Leeds; ruined castle (c. 1080) where Richard II. was killed (1400); market gardens; grain; iron industries; tanning; makes 'Pomfret cakes' from liquorice. Pop. 19,100.

Pontevedra (*pon-ti-vē-drā*), city, cap. prov. Pontevedra, n.w. Spain, 30 m. s.w. of Santiago, at head of steep bay; fishing, food preserving; leather and pottery. Pop. 27,000.

Pontiac (*pon'ti-ak*), city, Michigan,

U.S.A., 26 m. s.w. of Detroit; summer resort; exports wool and agricultural produce; motor-car industries. Named after famous Indian chief (c. 1712-69) who assisted French against British. Pop. 65,000.

Pontresina (*pon-trä-zä-nä*), vil., Grisons, Switzerland, in Upper Engadine, 3 m. s. of St. Moritz; tourist resort; alt. 5,916 ft. Pop. 950.

Pontypool, urb. dist., Monmouthshire, England, 9½ m. n. of Newport; great centre of coal and iron trade; tin and iron works. Pop. 6,800.

Pontypridd (*pon'ti-prith*), urb. dist., Glamorganshire, Wales, at confluence of Rs. Rhondda and Taff, 12 m. s.w. of Cardiff; iron and coal mines, foundries, chain and cable works. Pop. 42,700.

Poole, port, Dorsetshire, England, on Poole Harbour (7 m. long), 30 m. n. of Dorchester; yacht building; fishing. During Great War ship-building yards were established and large cordite works were erected. On Branksea I., at mouth of harbour, is Branksea Castle; potter's clay quarried. Pop. 57,300.

Poo'na, tn., Bombay, India, in W. Ghats, 80 m. s.e. of Bombay; headquarters of Bombay army; seat of govt. of Bombay during wet season; alt. 1,850 ft.; cotton, paper, sugar, and rice mills. Pop. 215,000.

Popayan, chief tn., dep. Popayan, s. Colombia, S. America, on R. Cauca; at foot of volcano Purace, 245 m. s.w. of Bogota; cathedral; univ. Pop. 20,000.

Poperinge (*pö-per-äng*), tn., W. Flanders, Belgium, 8 m. w. of Ypres; woollen and linen goods; hops. During Great War important military railhead. Pop. 12,500.

Poplar, bor., London, England, 3 m. n. of St. Paul's; contains E. and W. India and Millwall Docks; ship-building, chain cable works, tank works, and wire-rope factories. Pop. 155,100.

Popocatepetl ('smoking mt.'), dormant volcano, Mexico, 45 m. s.e. of Mexico City; sulphur obtained from crater; alt. 17,876 ft.

Porban'dar, port, Bombay, India, on Kathiawar peninsula; cement; silk and cotton. Pop. 29,500.

Portenone (*pör-dä-nö-nä*), tn., Udine prov., Venetia, Italy, 38 m. n.e. of Venice; cotton, silk, pottery. Pop. 20,000.

Pö'ri, formerly Björnesborg, port, Finland, at mouth of R. Kumo, on Gulf of Bothnia; timber products, textiles. Pop. 17,500.

Port Adelaide, port of Adelaide, S. Australia, on Gulf of St. Vincent; silver and copper smelting works.

Portadown, mkt. tn., Armagh, N. Ireland, 25 m. s.w. of Belfast, on Upper Bann; linen. Pop. 12,000.

Portage la Prairie, tn., Manitoba, Canada, on Assiniboine R., 56 m. w. of Winnipeg; agricultural market; grain elevators; flour mills; railway workshops. Pop. 6,500.

Portalegre (*pör-tä-lä-grä*), tn., Alemtejo, Portugal, 37 m. s.w. of Badajoz; cathedral; cloth. Pop. 11,500.

Portarlinton, mkt. tn., Leix and Offaly cos., I.F.S., on R. Barrow, 42 m. s.w. of Dublin. Pop. 2,000.

Port Arthur. (1) Port, Ontario, Canada, on L. Superior; great grain port, lumbering and mining centre; bricks. Pop. 16,500. (2) (Chinese *Lushunkau*), harbour, Manchuria, China, on s.e. side of Liaotung peninsula; in Japanese terr. of Kwantung; formerly leased by China to Russia, who fortified it and made it terminus of Siberian Railway; capitulated to Japanese (Jan. 1905), after a siege of eleven months. Pop. 24,500. (3) Port, Texas, U.S.A., on Lake Sabine, on Louisiana border; oil refining; petroleum and oil products. Pop. 50,000.

Port Augusta, port, S. Australia; at head of Spencer Gulf, on transcontinental rly.; exports flour, copper, tallow, and hides. Pop. 1,500.

Port-au-Prince (*pör-tö-prins*), cap., Haiti Rep., W. Indies, on w. coast; exports coffee; also logwood and cacao; good harbour. Pop. c. 125,000.

Port Blair, tn. and harbour, S.

Andaman I., Bay of Bengal; Indian convict settlement. Pop. 13,500.

Port Chalmers, tn., South Island, New Zealand; port of Dunedin. Pop. 2,600.

Portchester, par. and vil., Hants, England, 4 m. N.W. of Portsmouth; has ruins of Roman fort and of Norman castle; superseded by Portsmouth as naval port. Pop. 2,000.

Port Chester, vil., New York, U.S.A., on Long Island Sound, 26 m. N.E. of New York; summer resort; cotton and woollen goods, carriages, and ironware. Pop. 17,000.

Port Colborne, tn., Ontario, Canada, on N.E. shore of L. Erie; s. entrance to Welland Canal. Pop. 5,500.

Port Darwin. See DARWIN.

Port Elizabeth, port, Cape Prov., S. Africa, on Algoa Bay, 436 m. by sea E. of Cape Town; open harbour but safe roadstead; exports wool, mohair, ostrich feathers, fruit. Pop. 53,000.

Port Erin, wat.-pl., Isle of Man, 4½ m. W. of Castletown; marine biological laboratory and fish hatchery.

Port Florence. See KISUMU.

Port Fu'ad, tn., at Mediterranean entrance to Suez Canal, opposite Port Said; engineering and repair shops; garden city for workpeople of Port Said. Pop. 30,000.

Port Glasgow, port, Renfrewshire, Scotland, on R. Clyde, 2½ m. S.E. of Greenock; graving dock, shipbuilding yards; sails, tents, ropes, brass and iron founding. Founded in 1668 as a port for Glasgow. Pop. 19,600.

Portlennone (*port-len-on'*), par. and mkt. tn., Antrim, N. Ireland, on R. Bann, 9 m. W. of Ballymena; linen and salmon fishing. Pop. (par.) 3,400.

Port Harcourt, port, Nigeria, W. Africa, on Bonny R.; outlet for Udi coalfield; palm oil.

Port-hawl, urb. dist., Glamorgan-shire, Wales, on Bristol Channel; bathing resort; exports coal and iron. Pop. 6,400.

Port Herald, vil., Nyasaland, Africa, on Shire riv.; depot of Brit. Cotton-growing Association; on rly. from Chindio to Blantyre.

Portliffen, port, Cornwall, England, on Mount's Bay; fishing. Pop. (eccles. dist.) 1,600.

Port Huron, city, Michigan, U.S.A., on L. Huron, at mouth of St. Clair R.; opposite Sarnia, Ontario; summer resort; mineral springs; port of entry on Great Lakes; dry docks, shipyards, grain elevators. Pop. 31,000.

Portici (*port-ti-chi*), port, Campania, Italy, on Bay of Naples; fishing; silk; built over part of site of Herculaneum. Pop. 21,500.

Portishead (locally Posser), urb. dist., Somerset, England, on Severn estuary, 11½ m. W. of Bristol; port with grain warehouses; naval college; wat.-pl. Pop. 3,900.

Port Jackson. See SYDNEY.

Portland. (1) City, Oregon, U.S.A., at head of navigation of Willamette trib. of Columbia riv.; lumber and wheat exports; timber manufactures, meat packing. Pop. 302,000. (2) Port, Maine, U.S.A.; winter port for several transatlantic lines; deep and spacious harbour; fishing; shipbuilding; foundries, machine shops. Birthplace of Longfellow. Pop. 71,000.

Portland, ISLE OF, peninsula, with urb. dist., s. Dorsetshire, England; connected with mainland by Chesil Bank; breakwater on N.E. forms harbour of refuge; convict prison on isl.; extensive quarries of fine building stone; fishing. Pop. of urb. dist., 12,000.

Port Louis, cap. and port, Mauritius, Indian Ocean, on N.W. coast; cathedrals, observatory; exports sugar. Pop. 54,500.

Port Lyttelton. See LYTTELTON.

Portmadoc, urb. dist., Carnarvon-shire, Wales, on Tremadoc Bay, 11 m. E. of Pwllheli; exports slates from Festiniog quarries. Pop. 4,000.

Port Mahon (or *ma'on*), cap. of Minorca, Balearic Islands, Spain, on S.E. coast; exports live-stock, cheese, boots and shoes; strongly fortified; safe port. Pop. 18,000.

Port Natal. See DURBAN.

Port Nelson, port, Manitoba, Canada,

at mouth of Nelson R., Hudson Bay; old Hudson's Bay Company's fort.

Port Nolloth, port, N.W. Cape Prov., S. Africa, 50 m. S.E. of mouth of Orange R.; rly. to Ookiep copper dist.; exports copper; diamonds found. Pop. 1,000.

Porto Alegre (*á-lá-grá*), cap., Rio Grande do Sul, Brazil; extensive harbour; cathedral; cottons, boots and shoes; jerked beef, hides, beans, and cereals exported. Pop. 180,000.

Portobello, wat.-pl., Scotland, on Firth of Forth, within city of Edinburgh; bottles, bricks, and pottery.

Porto Bello, or **PUERTO BELLO**, seaport, Panama, 20 m. N.E. of Colon; port from which Spanish treasure fleet used to sail; captured by British (1739) during war with Spain.

Porto Ferrajo (*fer-á-yó*), cap., isl. of Elba, W. Italy; exports iron ore. Pop. 12,000.

Port of Spain, chief tn. and port, Trinidad, Brit. W. Indies; on shallow but sheltered harbour; place of call for ocean steamers; exports petroleum, cocoa, sugar. Pop. 67,000.

Porto No'vo. (1) Port, Madras, India, on Coromandel coast; here Haidar Ali was defeated by Sir Eyre Coote (1781). Pop. 13,000. (2) Cap. Dahomey, French W. Africa; on a lagoon in Gulf of Guinea; exports palm kernels and oil. Pop. 27,000.

Porto Rico (*ré-kó*), isl., W. Indies; most easterly and smallest of Greater Antilles, 75 m. E. of Haiti; interior rugged and mountainous; low coastal plain; no navigable riva; climate equable and comparatively healthy; cane-sugar, coffee, tobacco, and fruits produced. Discovered by Columbus (1493); ceded to U.S.A. (1898) after Spanish-American War. Chief tn., San Juan. Area, 3,435 sq. m.; pop. 1,300,000.

Portpatrick, fishing vil. and seaside resort, in w. of Rhinns of Galloway, Wigtownshire, Scotland, 7½ m. S.W. of Stranraer, 21½ m. N.E. of Donaghadee. Pop. 1,500.

Port Phillip, landlocked bay, Victoria, Australia, on S. coast;

with Melbourne on N. and Geelong on W.

Port Pirie, port, S. Australia, on Spencer Gulf, 130 m. N. of Adelaide; smelting and refining of Broken Hill ores; exports wheat and minerals. Pop. 10,000.

Portree, port and vil., on E. of Isle of Skye, Inverness-shire, Scotland; tourist resort. Pop. (par.) 2,120.

Portrush, summer resort, N. Antrim, N. Ireland; electric tramway to Giant's Causeway, 8 m. E.; excellent golf links. Pop. 2,100.

Port Said (*sá-sá*), tn. at entrance to Suez Canal, Egypt; one of largest coaling stations in world; rly. communication with Cairo and Suez; exports cotton; statue of Lesseps on breakwater. Pop. 101,000.

Port'slade-by-Sea, urb. dist., Sussex, England, 4 m. W. of Brighton; seaside resort. Pop. 9,500.

Portsmouth. (1) Co. bor., Hants, England, 27 m. S.E. of Southampton, on Portsea I.; includes Portsmouth proper, Portsea (naval dockyard), Southsea, and Landport; greatest arsenal, chief naval station, and most strongly fortified place in U.K. Whale I. is school of gunnery. Pop. 249,300. (2) City, New Hampshire, U.S.A., 58 m. N.E. of Boston; only seaport of state; large navy yard; builds submarines; summer resort. Treaty of Portsmouth (1905) ended war between Japan and Russia. Pop. 14,000. (3) Tn., Norfolk, S.E. Virginia, on R. Elizabeth; naval yard; exports oysters, vegetables, farm produce, lumber, and cotton. Pop. 45,000. (4) Tn., Ohio, U.S.A., on R. Ohio; manufactures aeroplanes, iron and steel goods, shoes, bricks, stoves and ranges. Pop. 43,000.

Port'soy, port, Banffshire, Scotland, 8½ m. W. of Banff; fish curing; oatmeal mills; holiday resort. Pop. 1,700.

Port Sudan, port, Anglo-Egyptian Sudan, on Red Sea; gum, ivory, cotton, sesame, durra; rly. to Berber on R. Nile. Pop. 21,500.

Port Sunlight, model industrial vil.,

Cheshire, England, 3 m. S.E. of Birkenhead; built (1890) by Lever Brothers, Ltd., in connection with their soap works.

Port Tal'bot, port, Glamorganshire, Wales, on E. of Swansea Bay, 10½ m. S.E. of Swansea; Cwm Avon copper works. Pop. 40,700.

Port Tewfik, tn., Egypt, at Red Sea entrance to Suez Canal, opposite Suez.

Portugal, rep., forming w. part of Iberian Peninsula, Europe; bounded on N. and E. by Spain, W. and S. by Atlantic Ocean; consists of six provs.—Entre Minho-e-Douro, Beira, Trás-os-Montes, Alentejo, Estremadura, Algarve; Azores and Madeira Islands regarded integral parts of Portugal; length, N. to S., c. 360 m.; average breadth, 100 m.; coast-line, c. 460 m., with two large indentations—Bay of Setúbal and estuary of R. Tagus. Surface is generally mountainous, especially N. of Douro, where Cantabrian Mts. terminate; between Douro and Tagus rive. is Serra da Estrela (6,532 ft.), which reaches ocean at Cape Roca, the most westerly point of Europe; the Serra de Monchique (2,963 ft.) runs into Atlantic at Cape St. Vincent; plains stretch S. of R. Tagus; coastal dists. generally flat (except near Lisbon and in S.) and marshy; principal rivs., Minho, Douro, Tagus, and Guadiana. Climate is generally equable; marshy dists. unhealthy; country subject to heavy rainfalls (greatest in N. and Serra da Estrela); extensive forests of cork oak, pine, cypress, mainly in S.; large tracts of pastureland; principal products are wheat, maize, oats, barley, rice, potatoes; figs, olives, grapes and other fruits; timber; wine-making important; famous port-wine dist. is Alto Douro; cattle rearing in N.; sheep and goats in mts., and pigs in S.; valuable fisheries (sardine, tunny, oyster, whiting); mineral wealth considerable but undeveloped; industries are cotton spinning, weaving of woollens, silks, linen, cork-cutting, tanning, porcelain tiles; chief exports: wine,

fish, cork, cottons, fruits, timber. Cap. Lisbon. Area (including Azores and Madeira), 35,490 sq. m.; pop. 6,000,000.

Dependencies and colonies: Cape Verde Islands, Portuguese Guinea, Angola, São Thomé and Príncipe (islands), and Mozambique, in Africa; Goa, Daman, Diu (India), Macao (China), and part of Timor in E. Indian Archipelago. Total area, 945,375 sq. m.; pop. 10,500,000.

Portuguese East Africa, or **MOZAMBIQUE**, Portuguese colony, between Tanganyika Terr. on N. and Natal on S., with other Brit. terrs. on W. and Indian Ocean on E. N. of R. Zambezi surface mountainous; S. of Zambezi occupied by scattered mountain groups; rivs. S. of Zambezi include Pungwe, Sabi, and Limpopo. Rainy season Nov. to March; mean temp. at Tete is 84° F., July (coldest month) 72° F.; marshy coasts unhealthy; highlands temperate and salubrious; products include sugar, maize, cotton, gold, silver; highlands yield timber; chief exports: sisal, vegetable oils, sugar. Rlys. from Beira to S. Rhodesia and Murrça on R. Zambezi (for Nyasaland); from Delagoa Bay to Swaziland and Transvaal. Cap. Lourenço Marques. Area, c. 300,000 sq. m.; pop. c. 3,500,000 (18,000 whites).

Portuguese Guinea, Portuguese colony, Senegambia, W. Africa; along Atlantic Ocean and enclosed landward by French terr.; consists of low coast and Bissagos Archipelago; rubber, palm nuts, ground nuts, hides, wax. Cap. Bolama; chief port, Bissau. Area, 22,000 sq. m.; pop. 344,000.

Portuguese India. See **INDIA**, **PORTUGUESE**.

Portuguese West Africa. See **ANGOLA**.

Por'voo, formerly **BORGÅ**, port, Finland, on Gulf of Finland, c. 30 m. N.E. of Helsinki; sailcloth, tobacco. Pop. 5,500.

Posen. See **POZNAN**.

Postu'mia-Grot'te, formerly **ADELS-**

BERG, tn., Italy, in Karst country, 23 m. N.E. of Trieste; stalactite caves and subterranean riv. Pop. 4,500.

Potchefstroom (*pō'chef-strōm*), tn., Transvaal, S. Africa, on Mool R., 88 m. S.W. of Johannesburg; govt. experimental farm; oldest tn. in prov. (founded 1839). Pop. 15,000 (9,500 whites).

Poten'za, tn., Italy, 70 m. W. by N. of Taranto; cathedral; almost wholly destroyed by earthquake (1857). Pop. 18,500.

Poti (*pō'tē*), port, Georgia, U.S.S.R., on Black Sea, at mouth of R. Rion; rly. to Baku oilfields; sawmills. Pop. 14,000.

Poto'mac, riv., U.S.A.; rises in Alleghany Mts., forms boundary between Maryland on N., and W. Virginia and Virginia on S.; flows into Chesapeake Bay; navigable below Washington; chief trib. Shenandoah. Length, c. 450 m. Has many associations with American Civil War.

Poto'si, tn., Bolivia; cap. of dep. of same name, 50 m. S.W. of Sucre, on flank of Cerro de Potosi (15,381 ft.); founded 1547; formerly celebrated for silver mines; tin mines; cathedral (1810); alt. 13,600 ft. Pop. 30,000.

Pototan', tn., Panay, Philippine Islands, c. 17 m. N.E. of Iloilo; sugar, rice, tobacco; cattle. Pop. 26,000.

Pots'dam, chief tn., Brandenburg, Prussia, Germany, on R. Havel, 16 m. S.W. of Berlin; former royal palaces with luxurious gardens; Brandenburg gate is noteworthy; furniture, chemicals, tobacco, and sugar; flower gardens. Pop. 64,000.

Pot'teries, THE, dist., N. Staffs, England; coalfields; chief seat of Eng. porcelain industries; principal tn., Stoke-on-Trent.

Potts'town, bor., Pennsylvania, U.S.A., on Schuylkill R., 35 m. N.W. of Philadelphia; iron and steel; agricultural implements, silk, and hosiery. Pop. 17,500.

Potts'ville, city, Pennsylvania, U.S.A., on Schuylkill R., 90 m. N.W.

of Philadelphia; steel, iron, lumber; rly. repair shops; large coal shipments; anthracite. Pop. 22,000.

Poughkeepsie (*pō-hip'sē*), city, New York, U.S.A., on Hudson R., 70 m. N. of New York city; educational institutions; agricultural implements. Pop. 40,000.

Poul'ton-le-Fylde, urban dist. and mkt. tn., Lancs, England, 3 m. N.E. of Blackpool; agricultural centre. Pop. 3,400.

Poynton, eccles. dist. and vil., Cheshire, England, 6½ m. N. of Macclesfield; coal mines. Pop. (dist.) 3,500.

Posar'evac, or PASSAR'OWITZ, tn., Serbia, Yugoslavia, 12 m. S.E. of Smederevo (Semendria); agricultural market. Pop. 11,000.

Posnan, formerly POSEN, tn., Poland, on R. Warta, 90 m. N. of Breslau; rly. jn.; agricultural machinery, locomotives; trade in grain, cattle, timber, wool; one of oldest tns. in Poland. Pop. 185,000.

Posoblan'co, tn., S. Spain, 37 m. N. of Cordoba; cloth and woollen weaving; zinc and silver-lead mines in vicinity. Pop. 18,000.

Pozsony. See BRATISLAVA.

Pozzuoli (*pōt-soo-ō'lē*), formerly PUTE'OLI, port, Campania, Italy, 7½ m. by rail W. of Naples; iron industries; ordnance works; Roman remains. Pop. 24,000.

Prague, or PRAHA, cap. Czechoslovakia, on R. Vltava. Notable features include fortress of Hradcany (Hradchin), Gothic cathedral (begun 1344), palaces, monasteries, and gardens, Parliament House and Wallenstein's palace. Chief financial and industrial centre; engineering and iron works; sugar and flour mills; chemicals, vehicles, cement. Pop. 677,000.

Frat'o, tn., Italy, 11 m. N.W. of Florence; 12th cent. cathedral; straw, woollen and cotton goods; quarries of serpentine in vicinity. Pop. 61,000.

Prenzlau (*prents'low*), or PRENZLOW, tn., Brandenburg, Prussia, 30 m. W. by S. of Stettin; sugar, beer, tobacco,

cigars, margarine, woollen goods, machinery. Pop. 22,000.

Prerov (*przher'of*), *tn.*, Moravia, Czechoslovakia, 12 m. S.E. of Olomouc; old castle; textiles, hardware, machinery, sugar. Pop. 21,500.

Prescot, *urb. dist.*, Lancs, England, 7 m. E. of Liverpool; reservoirs for Liverpool water supply; watches; electric cables; coal mines. Pop. 9,400.

Presov (*pres'h'of*), formerly EPERIES, *tn.*, E. Slovakia, Czechoslovakia; rly. *jn.*; administrative centre. Pop. 16,500.

Pressburg. See BRATISLAVA.

Prestat'yn, *mkt. tn.*, Flintshire, Wales, 4 m. E. of Rhyl; wat.-pl. and health resort; Offa's Dyke begins in vicinity; remains of submerged forest. Pop. 4,500.

Presteigne (*pres'ten'*), *co. tn.*, Radnorshire, Wales, on R. Lugg, 6½ m. N.E. of New Radnor; wool manufactures; limestone quarries. Pop. 1,100.

Preston. (1) *Tn.*, Lancs, England, near mouth of R. Ribble; rly. *jn.*; cotton spinning; iron and brass foundries; electrical engineering; shipbuilding; docks; exports coal. Pop. 118,800. (2) *Tn.*, Ontario, Canada, 25 m. N.W. of Hamilton. Pop. 5,900.

Prestonpans, *tn.*, E. Lothian, Scotland, on Firth of Forth, 9 m. E. of Edinburgh; soap, breweries, pottery; coal mines. Scene of defeat of Sir John Cope by Prince Charles Edward (Sept. 21, 1745). Pop. 2,400.

Prestwich, *urb. dist.*, Lancs, England, 4½ m. by rail N.W. of Manchester, of which it is a residential suburb; cotton industry. Pop. 23,900.

Prestwick, *tn.*, Ayrshire, Scotland, 2½ m. N. of Ayr; golf links. Pop. 8,500.

Preto'ria, *cap.*, Transvaal, S. Africa; administrative *cap.* of Union of S. Africa; Parliament House and other govt. buildings; alt. 4,471 ft. Pop. 83,500 (54,500 whites).

Pribilof Islands, in Bering Sea, Alaska, U.S.A.; of volcanic origin; centre of fur-seal fishing. Pop. 500.

Prib'ram, *tn.*, Bohemia, Czechoslovakia, 12½ m. S. of Pilsen; silver, lead, zinc, antimony, bismuth mines; Heiliger Berg, place of pilgrimage, in vicinity. Pop. 12,000.

Priego de Cor'doba (*prê-d'gô*), *tn.*, S. Spain, 45 m. S.E. of Cordoba; anc. stronghold of Moors; oil, silk, and wine. Pop. 17,000.

Prince Al'bert, *tn.*, Saskatchewan, Canada, on N. Saskatchewan riv., 85 m. N.E. of Saskatoon; lumbering centre; fur trade; rly. *jn.* Pop. 7,850.

Prince Edward Island, smallest prov., Canada, in Gulf of St. Lawrence; surface flat; temperature, Jan., 16° F., July, 65° F.; oats, potatoes; livestock; dairy produce; fox farms. Discovered by Sebastian Cabot (1497). *Cap.* Charlottetown. Area, 2,184 sq. m.; pop. 89,000.

Prince Rupert, *port*, Brit. Columbia, Canada, on isl. N. of mouth of Skeena R.; terminus of Canadian National Rly.; fishing, lumbering, mining. Pop. 7,500.

Prince's Island. See PRINCEPE.

Princes Islands, group of nine islets in E. of Sea of Marmara, Turkey, 15 m. S.E. of Constantinople; frequented for their beauty and mild climate.

Prin'ces Ris'borough, *mkt. tn.*, Bucks, England, 7½ m. S. of Aylesbury; in gap of Chiltern Hills; chair-making; bead and sequin work. Pop. 2,440.

Princeton, *bor.*, New Jersey, U.S.A., 10 m. N.E. of Trenton; univ. Pop. 6,000.

Prin'ce's town, or PRINCE TOWN, *eccles. dist. and vil.*, Devon, England, 15 m. N.N.E. of Plymouth; Dartmoor convict prison and granite quarries in vicinity. Pop. (dist.) 2,070.

Princepe (or PRINCE'S) *Island* (*prên'-sê-pê*), Portuguese isl., Gulf of Guinea, Africa; volcanic origin; cocoa. Area, 42 sq. m.; pop. 5,000.

Pripet, *riv.*, one of chief tribs. of R. Dnieper; rises in Poland, flows through White Russia into Ukraine to join Dnieper 50 m. N. of Kiev; flows

sluggishly through Pripet Marshes (30,000 sq. m., of which over 20,000 sq. m. have been reclaimed). During the Great War the Germans in 1915 drove Russian armies back as far as Pripet Marshes.

Prizren, tn., s. Serbia, Yugoslavia, near n.e. boundary of Albania; weapons, steel, glass, pottery, leather; seat of Serbian government after outbreak of Great War; captured by Bulgars (Dec. 1915). Pop. 16,500.

Procida (*prô'chè-dà*), (1) Volcanic isl., Italy, in w. of Gulf of Naples, 2 m. from mainland; wine, fruit, fishing. Pop. 11,000. (2) Tn., on E. coast of isl.; castle. Pop. 3,500.

Prome, tn., Lower Burma, India, on R. Irrawaddy, 160 m. N. of Rangoon by rail; silk, cotton, rice, tobacco; teak; ornamental woodwork. Pop. 26,000.

Prostejov (*prô'stye-yof*), tn., Moravia, Czechoslovakia, 12 m. s.w. of Olomouc; clothing, shoes, agricultural implements, beer; geese largely reared. Pop. 31,000.

Provence (*prô-vons'*), anc. prov., s.e. France; now forms depts. Bouches-du-Rhône, Var, Basses-Alpes, and E. part of Vaucluse; formerly the *Provincia Romana* of the Romans; joined to France in 1486. Dist. remarkably rich in Roman and mediæval remains.

Providence, cap. Rhode I., U.S.A., 44 m. s.w. of Boston; many educational institutions; important port; industrial centre; foundry and machine-shop products; woollen and worsted goods; jewellery. Pop. 252,000.

Prudhoe (or *prô'dô*), urb. dist., Northumberland, England, on R. Tyne, 11 m. w. of Newcastle; collieries; anc. castle. Pop. 9,300.

Prussia, rep., Germany; mainly situated in great N. German Plain; contains fifteen provs.: East Prussia, Brandenburg, Berlin, Pomerania, Border Prov. (*Grenzmark*), Lower Silesia, Upper Silesia, Saxony, Schleswig-Holstein, Hanover, Westphalia, Hesse-Nassau, Rhine, Hohenzollern,

Waldeck; E. Prussia is separated from other provs. by Poland and Free City of Danzig. Seaboard c. 900 m.

—750 on Baltic, rest on North Sea. Large stretches of moorland, sandy plains, and marshland along coast; mts. lie in s. and s.w.; Riesengebirge, in Silesia; Harz Mts., in Saxony; Hunsrück, Taunus, Eifel, Westerwald, in Rhine Prov.; principal rvs.: Rhine, Weser, Elbe, Oder, Ems; many navigable and linked by canals; Kiel Canal zone is under control of League of Nations; many lakes, especially in Pomerania, Border Prov., and E. Prussia; lagoons on coast—Kurisches Haff, Frische Haff, and Stettiner Haff. Climate generally healthy; E. more extreme than W.; average ann. rainfall is c. 21 in.; forests of fir, spruce, larch, beech, birch, oak; important agricultural, mining, and manufacturing industries; principal products are cereals, beet, hemp, flax, potatoes, hops, oil-seed, live-stock, timber; famous wines made in Nassau and Rhine Prov.; horses bred in E. Prussia; rich in minerals—coal, iron, zinc, copper, lead, cobalt, arsenic, sulphur, nickel; important mining centres are Westphalia, Silesia, Rhine Prov., Harz Mts., Saxony, Brandenburg, Nassau; manufactures include textiles, iron and steel goods, leather, glass, china, earthenware, chemicals, musical instruments, paper, breweries and distilleries; salmon, herring, cod, oyster fisheries; many mineral springs. The principal towns are: Berlin (cap.), Cologne, Breslau, Frankfurt-on-Main, Essen, Dortmund, Düsseldorf, Hanover, Gelsenkirchen-Buer, Magdeburg, Königsberg, Duisburg; Altona, Stettin, Kiel important seaports. Area, 113,038 sq. m.; pop. 38,176,000.

Prut (*proot*), riv., Romania; rises on N. of Carpathians and flows s. to join R. Danube below Galatz. Length, c. 500 m.

Przemysl (*pehem'ishl*), tn., Poland, on R. San, trib. of R. Vistula, 60 m. w. of Lwow; two cathedrals; wood, leather, corn, and linen; before Great

War the strongest fortress in Galicia; important rly. jn.; scene of heavy fighting during Great War. Pop. 48,000.

Pakov, tn., Leningrad area, Russia, c. 10 m. s. of L. Pskov and near Estonian boundary; rly. jn.; educational centre; flax; timber; leather. Pop. 40,000.

Pud'sey, munic. bor., W. Riding, Yorks, England, 3 m. E. of Bradford; woollen and worsted goods; leather; iron and brass founding, electro-plating, and engineering. Pop. 14,800.

Puebla, tn., Mexico, 75 m. S.E. of Mexico City; one of oldest cities in rep.; alt. c. 7,000 ft.; cathedral; cotton and woollen mills. Pop. 96,000.

Puebla, city, Colorado, U.S.A., on Arkansas R., 120 m. S. of Denver; alt. 4,680 ft.; fine climate; mineral springs in irrigated area; oilfields, deposits of coal and other minerals near city; steel and iron works; large smelting centre for gold, silver, copper, zinc, and lead. Pop. 50,000.

Puente Genil (puen'tá hā-nēl), tn., Cordoba, s. Spain, on Genil trib. of R. Guadalquivir; olive oil. Pop. 18,000.

Puerto Cabello (puer'tō hā-bel'yo), port, Venezuela, on Caribbean Sea, c. 90 m. W. of La Guayra; rly. to Caracas; exports coffee, cacao, hides, tobacco, dyewoods, timber, copper ore. Pop. 23,000.

Puerto de Santa Maria (puer'tō dā sán'tā mār-ē'ā), port, Spain, on Bay of Cadiz, opposite Cadiz; exports sherry; important fisheries; leather, glass, and soap. Pop. 19,000.

Puerto Montt, port, cap. Chiloe, s. Chile; coasting trade; rly. terminus; serves sheep-farming dist. Pop. c. 10,000.

Puerto Principe. See CAMAGÜEY.

Puerto Rico. See PORTO RICO.

Pugachev, formerly NIKOLAEVSK, tn., s.e. Russia, 100 m. S. of Samara; agricultural market. Pop. 17,500.

Puget Sound (pū'jēt), land-locked arm of Pacific Ocean, Washington, U.S.A.; extends S. from Vancouver

I.; navigable throughout; shores wooded; fisheries. Chief ports are Seattle and Tacoma. Length, 125 m.

Puket (poo-ke'), or TONGKAL, port and chief tn. of Junk Ceylon; Siamese isl. N.W. of Malay Peninsula; tin mines; edible birds' nests. Pop. c. 30,000.

Pulborough, par. and mkt. tn., Sussex, England, on R. Arun, 11 m. S.W. of Horsham. Pop. (par.) 2,100.

Pulkovo (pool'hō-vō), or PULKOWA, vil., Russia, 10 m. S. of Leningrad; on adjacent hill (248 ft.) is famous meteorological observatory; univ.

Pulaski (pool'toosk), tn., Poland, on R. Narew, 32 m. N. of Warsaw; woollens, linens, hosiery, copper wares, and pottery. Pop. 16,000.

Punjab' ('land of the five rivs.—i.e., Jhelum, Chenab, Ravi, Beas, Sutlej), prov., N.W. India; bounded on N. by Kashmir, E. by United Provs., S. by Rajputana and Sind, and W. by Baluchistan and N.W. Frontier Prov.; vast alluvial plain of R. Indus; Himalayas in N.; includes irrigation areas on Lower Chenab and Lower Jhelum canals—fertile, wealthy, and populous; agriculture is staple industry; wheat most important crop; other crops barley, rice, millet, maize, oilseeds, cotton, and sugar-cane; livestock; mineral wealth small; cotton factories; govt. college at Lahore; art colleges and professional schools; chief tns.: Lahore (cap.), Amritsar, Multan, and Rawalpindi; over half pop. Mohammedan, one-third Hindu, and one-tenth Sikh. Area, 99,846 sq. m.; pop. 20,685,000 (including Indian States, 37,059 sq. m.; pop. 4,416,000).

Punta Arenas. See MAGALLANES (2).

Purbeck, ISLE OF, peninsula, S.E. Dorset, England, S. of Poole Harbour; traversed by chalk hills; quarries; contains Corfe Castle and town of Swanage. Length, 12 m.

Purfleet, urb. dist., Essex, England, on R. Thames, 16 m. E. of London; small harbour. Pop. 8,500.

Puri (poo'rē), JAGANNATH, or JUGERNAUT, chief tn., Orissa, India, on

Bay of Bengal; temple of Vishnu containing idol of Jagannath; great car festival (held annually) formerly associated with cruel rites. Pop. 39,000.

Puteaux (*pu-tū'*), tn., Seine, France, on R. Seine, 7 m. w. of Paris, of which it is a suburb; woollens; dyes. Pop. 40,000.

Putoli. See **POZZUOLI**.

Putney, metropolitan dist., Wandsworth, London, on river Thames; bridge is starting-place for Oxford and Cambridge boat race. Pop. 29,000.

Puy-de-Dôme (*pu-ē-dē-dōm'*). (1) Dep., central France, on N.E. edge of Auvergne plateau; surface generally mountainous; watered by rivs. Allier, Cher, Dordogne; rich plain of Limagne produces vine, fruits, and sugar-beet; coal and silver lead; mineral springs (Mont Dore). Cap. Clermont-Ferrand. Area, 3,090 sq. m.; pop. 515,000. (2) Mt., in above dep.; chief peak of Auvergne volcanic group; meteorological observatory; alt. 4,806 ft.

Pwllheli (*pool-hel'i*), port, Carnarvonshire, Wales, on Cardigan Bay; harbour of refuge; fishing centre; exports slates. Pop. 3,600.

Pyat'igorsk ('five mountains'), tn., North Caucasian Area, Russia, 80 m. S.E. of Stavropol; surrounded by five peaks; alt. 1,500 ft.; wat.-pl. with sulphur springs. Pop. 53,500.

Pyrenees (*pir'en-ēz*), mt. chain, Europe; stretches from S.E. Bay of Biscay to Mediterranean Sea; boundary between France and Spain; total length, c. 250 m.; width varies from 90 m. to c. 25 m. at Mediterranean end; chief summits: Aneto or Pic de Néthou (11,168 ft.), Pic de Poseto (11,047 ft.), and Mont Perdu (10,998 ft.); limit of perpetual snow, 9,000 ft. on N. and 10,000 ft. on S.; characteristic features are gullies enclosed on all sides by towering crags (*cirques*); poor in minerals; iron mines at Biscay end; slopes wooded with box, fir, and pine; five passes practicable for motor transport; crossed by three rlys.

Pyrénées-Orientales (*pè-rî-nâs-or-ē-on-tāl'*), dep., S. France; consists of slopes of main chain of N. Pyrenees; climate cool on mts., dry on plain along Mediterranean Sea; wine; oranges and other sub-tropical fruits; iron mined; coast lagoons produce salt. Amélie-les-Bains has sulphur springs. Cap. Perpignan. Area, 1,598 sq. m.; pop. 230,000.

Pyr'gos, tn., Achæa and Elis, Morea, Greece, 42 m. S.W. of Patras; devastated by Turks (1825); fishing and vines. Pop. 14,000.

Pythley (*pick'li*), par. and vil., Northants, England, 3 m. S. of Kettering; Pythley Hunt established in 18th cent.; kennels at Brixworth, near Northampton. Pop. (par.) 500.

Q

Qabes, or **GABES** (*kā'bez*), oasis tn., Tunisia, N. Africa, on gulf of same name; dates and other fruits; henna, wool, esparto grass. Pop. 20,000.

Qairwan, or **KAIRWAN** (*kîr-wan'*), anc. walled tn., Tunisia, N. Africa; sacred to Mohammedans; has citadel and many beautiful mosques; leather goods and carpets. Pop. 19,000.

Qais (*kis*), island, Persian Gulf; measures 10 m. by 5 m.; pearl fishing. Pop. c. 2,000.

Qantara, E.L. See **SUEZ CANAL**.

Qara Qum (*kā'ra hoom*). (1) Flat, sandy desert, Central Asia; between R. Oxus on N.E. and Persia on S.W.; surrounds oasis of Merv. Area, c. 110,000 sq. m. (2) Desert region in the N. of the province of Sir Darya, Kazak, U.S.S.R.

Qona (*kôn'a*), cap. of province of same name in Upper Egypt, c. 380 m. S.S.E. of Cairo; famous for earthenware. Pop. 23,000.

Qishm (*kishm*), largest isl., Persian Gulf; length, *c.* 70 m.; breadth, 2 to 15 m.; produces grain, fruits, and salt. Chief town, Qishm. Pop. (isl.) *c.* 15,000. (tn.) *c.* 3,000.

Qizil Qum (*kis'il koom*), desert tract of w. Asia; is dried-up bed of anc. sea of which Aral Sea is remnant. Length (n. to s.), 200 m.; breadth, 380 m.

Qoseir, El. (*ko-sēr*), seapt., w. coast of Red Sea, Egypt; terminus for caravan route from R. Nile.

Quantock Hills, hills, Somerset, England, stretch 10 m. s.e. from Bristol Channel; reach 1,262 ft. in Will's Neck.

Quarry Bank, urb. dist., Staffs, England, in extreme s. of co.; in Black Country. Pop. 8,100.

Quebec (*kwe-bek'*). (1) Eastern prov., Dominion of Canada, lies along lower course of St. Lawrence R., and extends n. to Hudson Strait; bounded on w. by Hudson Bay and Ontario, on e. by Labrador, s. by New Brunswick and U.S.A.; surface generally undulating; drained by R. St. Lawrence and tribs. (Ottawa, St. Maurice, and Saguenay). Much of surface forested, and Quebec has more than half Canadian production of pulpwood; cereals, flax, fruits, potatoes, and maple products; fur farming is important; yields most of world's supply of asbestos; other minerals include gold, copper, lead, silver, platinum; fisheries are extensive; manufactures include cement, textiles, leather, hardware, paper. Inhabitants are mainly of French extraction. Settled parts mostly on both sides of R. St. Lawrence, Eastern Townships lying between R. St. Lawrence and U.S.A. Chief towns are Montreal and Quebec (cap.). Area, 594,434 sq. m.; pop. 2,361,000. (2) Cap. of above, on St. Lawrence R., at mouth of St. Charles R.; founded (1608) by Champlain; taken by British under Wolfe (1759); battlefield now a national park, with monument to Wolfe and Montcalm. Consists of Upper and Lower Town, former residential, latter devoted to commerce.

(3,001)

Among principal buildings are Prot. and R.C. cathedrals, Parliament House, and archiepiscopal palace. There is an excellent harbour and large dry dock; important rly. centre. Quebec bridge crosses R. St. Lawrence 7 m. above city; exports include timber, grain, cattle, and cheese; manufactures woollens, hardware, and machinery. Pop. 131,000.

Quedlinburg (*kued'lin-boorg*), town, Saxony, Prussia, 13 m. s.w. of Magdeburg; flower and vegetable seeds, cloth, wire goods, starch, aniline dyes. Pop. 27,000.

Queenborough, munic. bor., Isle of Sheppey, Kent, England; packet station for Flushing; chemical manure and cement. Pop. 2,900.

Queen Charlotte Islands, off coast of Brit. Columbia, Canada; important fisheries; rich in timber; gold, copper, iron, and anthracite coal exist, but are not worked. Pop. *c.* 2,000.

Queensbury, urb. dist., W. Riding, Yorks, England, 4 m. n. of Halifax; makes alpaca, mohair, worsted, and dress goods. Pop. 5,800.

Queen's County. See LEIX.

Queens ferry. (1) Vil., Flintshire, England, on R. Dee, 5½ m. s.e. of Flint; shipbuilding; ferry over Dee. Pop. (dist.) 10,000. (2) North, vil., Fife, Scotland, at n. end of Forth Bridge; ferry to S. Queensferry. Pop. 1,650. (3) South, seapt. and royal burgh, West Lothian, Scotland, at s. end of Forth Bridge; of historic interest. Pop. 1,800.

Queensland, second largest state of Australia, bounded n. by Gulf of Carpentaria and Torres Strait, e. by S. Pacific, s. by New South Wales, and w. by S., Central, and N. Australia. Divided into two areas by Great Dividing Range, which follows coastline at distance of from 100 to 300 m.; country between range and coast consists of alluvial areas and rich river valleys. The Brisbane, Mary, Burnett, Fitzroy, Burdekin, and Johnstone rivers are the most important of e. watershed, while w. watershed has rivers flowing n. to Gulf of Carpen-

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taria, s. to Murray-Darling system, and w. to S. Australian lakes. Climate varies with latitude and height, n. being tropical and sub-tropical, s. having mean temp. of 70° F. Rainfall is generally adequate, being heavy in tropical regions of n., and averaging 60 in. in s.e., but inland parts suffer from drought. Thus artesian wells have been of great service. Chief agricultural products are cereals, sugar-cane, wine, cotton, tea, fruits, timber. Sheep, cattle, and horses are extensively reared, and form one of chief sources of wealth; and dairy farming is a rapidly expanding industry. Minerals are of great importance, including gold, silver, copper, tin, coal. Industries include manufactures of sugar, tobacco, leather, boots, spirits, flour, machinery, textiles, soap. Meat preserving is largely carried on. Chief exports are copper, tin, coal, meat, hides, skins, tallow, wool, and sugar. The population is more mixed than in any other part of Australia, and includes English, Chinese, Japanese, and Polynesians. Chief towns are Brisbane (cap.), Rockhampton, Townsville, Maryborough, Ipswich, and Toowoomba. Area, c. 670,500 sq. m.; pop. 756,000.

Queenstown. (1) See **COHL**. (2) Tn., w. Tasmania, Australia; smelting works. Pop. 2,600. (3) Tn., Cape Prov., S. Africa, on railway, midway between E. London and Aliwal N.; wheat and wool. Pop. 13,000 (5,000 whites).

Quelimane (*hel-i-mân'e*), seaport, Portuguese E. Africa; exports copra, ground-nuts, sugar, sisal, and cotton. Pop. c. 4,000.

Quelpart (*kwel'part*), Japanese isl. off s.w. of Korea; was long used as Korean convict station. Chief industries are agriculture, manufacture of bamboo hats and mats, and pearl fishing. Length, 40 m.; breadth, 10 to 20 m. Pop. c. 115,000.

Queretaro (*kā-rā-tā'rō*). (1) Central state of Mexico; produces maize, wheat, and fruits, and has silver, gold, copper, lead, tin, and antimony mines. Area, 4,493 sq. m.; pop. 220,000. (2) Cap. of above, 115 m. n.w. of Mexico City; cotton and woollen goods; pottery. Pop. 30,000.

Quetta (*kwe'ta*), cap. of Brit. Baluchistan, n.w. of Bolan Pass. Has great strategical position commanding w. gate to India; strongly fortified and connected with railway system of India; seat of Indian Staff Coll. Pop. 49,000.

Quezaltenango (*kā-sal-ten-an'gō*), tn., Guatemala, 70 m. w. of Guatemala city; trade in coffee, sugar, rubber, and hides; manufactures textiles. Pop. 20,000.

Quilon (*kwe-lon*'), seapt., Travancore, Madras, India; timber, coconuts, pepper, cardamoms. Pop. 25,000.

Quimper (*kun-pār*'), tn., Finistère, France, c. 70 m. s.e. of Brest; 13th cent. cathedral; manufactures pottery; sardine fisheries. Pop. 15,000.

Quincy (*kwin'si*). (1) City, Illinois, U.S.A., 95 m. w. of Springfield; machinery, vehicles, stoves, ironware, bricks, flour, and tobacco. Pop. 40,000. (2) City, Massachusetts, U.S.A.; residential suburb of Boston; granite quarrying and shipbuilding; foundry products. Pop. 72,000.

Quito (*kā'to*), cap. of Ecuador, S. America; on plateau of Andes (alt. 9,350 ft.); one of oldest cities in S. America and at one time Inca cap.; suffers from earthquakes; cathedral and univ.; carpets, blankets, shoes, saddles, woollen and cotton goods, rubber and hides. Pop. 82,000.

Qum (*room*), tn., Persia, 90 m. s. of Tehran; place of pilgrimage; glass, pottery, and shoes. Pop. c. 25,000.

Quorn'don, urb. dist., Leicestershire, England, 2½ m. s.e. of Loughborough; has kennels of Quorn Hunt; hosiery. Pop. 2,600.

R

Raab. See GYÖR.

Raasay (*räs'ä*), isl., Inner Hebrides, Inverness-shire, Scotland, separated from I. of Skye by Sound of Raasay, from mainland by Inner Sound; iron ore. Area, 24 sq. m.; pop. 370.

Rabat, seaport, Morocco, 110 m. w. of Fez; has sultan's palace; carpets and mats. Pop. 38,000.

Rabaul (*ra-ba'ool*), tn., Bismarck Archipelago, on New Britain Island; seat of government for mandated terr. of New Guinea. Pop. (white) 1,350.

Racine (*räs'sän*), city, Wisconsin, U.S.A., on L. Michigan, 60 m. n. of Chicago; agricultural machinery and motors; shipping trade in lumber and coal. Pop. 68,000.

Radauti (*rä'dä-oos'*), tn., Bukovina, Romania, 32 m. s. of Cernauti; glass and paper works. Pop. 17,000.

Radcliffe, urb. dist., Lancashire, England, on R. Irwell, 8 m. n.w. of Manchester; cotton spinning, weaving, dyeing and bleaching, iron foundries and collieries. Pop. 24,700.

Radeberg (*rä'de-berg*), tn., Saxony, Germany, 10 m. n.e. of Dresden; glass, enamels, beer, paper; cattle markets. Mineral springs. Pop. 16,000.

Radnorshire, inland co., S. Wales, between Cardigan on w. and Hereford on e.; drained by Rs. Wye and Teme; surface hilly, except in the vale of Radnor, Radnor Forest reaching 2,186 ft.; mineral springs at Llandrindod and elsewhere; oats and wheat grown, but three-fourths of land under permanent pasture; sheep rearing and breeding of Welsh ponies very successful, also butter making; sandstone and limestone are quarried. Co. tn., Presteigne. Area, 470 sq. m.; pop. 21,300.

Rad'om, tn., Poland, 60 m. s. of Warsaw; coal, leather, machine shops. Pop. 62,000.

Radom'sko, tn., Poland, 30 m. s.

of Lodz, on R. Warta; textiles, furniture, tanneries, and sawmills. Pop. c. 20,000.

Rad'stock, urb. dist., Somerset, England, 16 m. by rail s.e. of Bristol; coal mines. Pop. 3,600.

Ragusa. (1) See DUBROVNIK. (2) Tn., Sicily, 35 m. s.w. of Syracuse; oil and paving stone. Pop. 48,000.

Raichur (*ri-choor*), tn., Hyderabad, India, 80 m. n. of Bellary; cotton presses; famed for glazed pottery. Pop. 26,000.

Raigarh (*ri-gur*), Indian state, Central Provinces, India; grows rice and pulses; has 1,800 irrigation tanks; manufactures silk. Cap. Raigarh, 360 m. w. of Calcutta. Area, 1,486 sq. m.; pop. 242,000.

Rainford, urb. dist., Lancs, England, 4 m. n.w. of St. Helens; coal mines. Pop. 3,500.

Rainham. (1) Par. and vil., Essex, England, 12½ m. e. of London; brick and tile making. Pop. (par.) 2,850. (2) Par. and vil., Kent, England, 4 m. s.e. of Chatham; bricks and cement made. Pop. (par.) 5,600.

Rainhill, par. and vil., Lancs, England, 9 m. e. of Liverpool; brass-founding; small tools made. Pop. (par.) 2,850.

Rainier (*rä'nër*), MOUNT, volcanic cone, Cascade Range, Washington, U.S.A., in Mt. Rainier National Park, c. 50 m. s.e. of Tacoma; above forests are many glaciers; steam and sulphurous fumes still come from crater; discovered by Vancouver (1792). Alt. 14,408 ft.

Raipur (*ri-poor*), chief tn., Raipur dist., Central Provinces, India, 160 m. e. of Nagpur; exports grain and cotton; has a leper asylum; fort dates from 1460. Pop. 30,000.

Rajahmun'dry, tn., Madras, Brit. India, on R. Godavari, at head of delta; of growing importance. Pop. 54,000.

Rajkot', chief town, Rajkot state, Kathiawar, Bombay, India; has a coll. for the sons of Indian chiefs; headquarters of political agent for Kathiawar. Pop. 36,000.

Rajputa'na ('land of the Rajputs'), largest Indian state, bounded on w. by Sind, on n.w. by Bahawalpur, on n. and n.e. by Punjab, on e. by United Provinces and Gwalior; s. boundary runs across central region of India in zigzag line. The region includes nineteen Indian states, one chiefship, and Brit. prov. of Ajmer-Merwara. Aravalli Hills intersect country almost from s.w. to n.e. Tract to n.w. of hills is generally sandy and unproductive, but relatively fertile in n.e. To s.e. of hills lie higher and more fertile regions traversed by considerable rivers (Banas and Chambal, tribs. of Jumna). Majority of people engaged in agriculture. The manufactures include cotton, woollens, ivory, and metal goods. Chief tns., Jaipur, Udaipur, Alwar, Ajmer, Jodhpur. Area, 131,698 sq. m.; pop. 10,300,000.

Raleigh, cap. of N. Carolina, U.S.A.; cotton mills; wood-working; printing; railway workshops. Educational centre. Pop. 37,000.

Rames'waram, tn., Madras, India, on isl. in Palk Strait; famous Hindu shrine; on rly. to Adam's Bridge.

Ramillies (*ri-mê-yê*), vil., Brabant, Belgium, 13 m. n.e. of Namur; scene of Marlborough's victory over French and Bavarians (1706).

Rampur'. (1) Indian state, United Provinces, India. Area, 892 sq. m.; pop. 454,000. (2) Cap. of above, 38 m. n.w. of Bareilly; damask, sugar, and pottery. Pop. 73,000.

Ramsbottom, urb. dist., Lancashire, England, on riv. Irwell, 4 m. n. of Bury; cotton and woollen factories; iron and brass foundries. Pop. 14,000.

Ramsey. (1) Seaport and bathing resort, n.e. Isle of Man, with park, Albert Memorial Tower, and House of Keys building. Pop. 4,700. (2) Mkt. tn., Hunts, England, 10 m. n.e.

of Huntingdon. Ramsey Mere, 2 m. n.e., has been drained, and produces fine crops of wheat. Pop. 5,200.

Ramsgate, munic. bor., Cinque port, wat.-pl., Isle of Thanet, Kent, England. Pop. 33,600.

Ranchi (*ran-chê*), tn., Chota Nagpur div., Bihar and Orissa, India; rice, tea, shellac; missionary centre; seat of provincial government in hot season. Pop. (tn.) 40,000.

Rand. See WITWATERSRAND.

Randazzo (*ran-dât'sô*), tn., Sicily; alt. 2,500 ft., at n. foot of Mt. Etna; fine palaces and picturesque churches; wine, oil, cheese. Pop. 17,000.

Ran'ders, tn., Jutland, Denmark, on Guden Aa, 23 m. n. by w. of Aarhus; has a 14th cent. church; iron foundries, machine and railway carriage shops, glove and watchmaking factories. Pop. 27,000.

Rangoon', cap. and chief port, Burma, India, on Rangoon R. (e. delta stream of R. Irrawaddy), 20 m. from sea; largest trade of any Indian port except Calcutta and Bombay; many pagodas, including Shwe Dagon (6th cent.), height 370 ft., covered with gold leaf and plates of gold. Rice mills, sawmills, wood and ivory carving, petroleum refineries (pipe line to oil-fields). Chief exports: rice, petroleum, teak, hides, and skins. Pop. 342,000.

Rannoch (*ran'och*), dist., n.w. Perthshire and n.e. Argyllshire, Scotland; elevated desolate moorland. Rannoch station is 5 m. w. of head of Loch Rannoch (9 m. long by 1 m. wide; alt. 668 ft.); fed by R. Erich and other streams; drains by R. Tummel into R. Tay. A hydro-electric station for the Grampians area on Loch Rannoch-side uses the fall of water brought by tunnel from Loch Erich.

Rapal'lo, seaport and winter resort, Italy, on Gulf of Genoa, 16 m. e.s.e. of Genoa; lace, olive oil. Pop. 14,000.

Raphoe (*ra-fô*), par. and mkt. tn., co. Donegal, I.F.S., 5 m. w.n.w. of Lifford; cathedral; episc. palace; tweeds and other woollens. Pop. (par.) 2,600.

Rarotonga, isl., Cook Islands, S. Pacific Ocean; volcanic (peak, 2,900 ft.); exports oranges, copra, bananas, tomatoes; wireless station; Polynesian inhabitants are Christians; isl. c. 20 m. in circumference. Pop. 4,000.

Ras'tatt, tn., Baden, Germany, 14 m. s.s.w. of Karlsruhe; lace, beer, stoves, and cigars. Pop. 14,000.

Ras'tenburg, tn., E. Prussia, Germany, 65 m. s.e. of Königsberg; manufactures machinery, beer, flour, and sugar. Pop. 14,000.

Rastrick. See BRUGHOUSE.

Rathenow (*ra'te-nō*), tn., Brandenburg, Prussia, on R. Havel, 45 m. w. by N. of Berlin; spectacles, optical instruments, bricks. Pop. 28,000.

Rathfarnham, par. and vil., co. Dublin, I.F.S., 3 m. S. of Dublin; residential centre. Pop. (par.) 11,100.

Rathkeale (*rath-kēl'*), par. and mkt. tn., co. Limerick, I.F.S., 18 m. s.w. of Limerick. Pop. (par.) 2,900.

Rathlin, isl., co. Antrim, N. Ireland, 6 m. N. of Ballycastle (5 m. by 1 m.); at N.E. end are ruins of castle in which Robert Bruce took refuge (1306), according to tradition. Pop. 350.

Rath'o, par. and vil., Midlothian, Scotland, 8 m. W. of Edinburgh; market gardening and quarrying. Pop. (par.) 1,700.

Ratibor, tn., Silesia, Prussia, on R. Oder, 90 m. s.e. of Breslau; railway workshops and iron foundries. Pop. 41,000.

Ratisbon. See REGENSBURG.

Ratlam, chief tn., Ratlam state, Central India, 65 m. N.W. of Indore; grain trade. Pop. c. 36,000.

Rat'tray, burgh, Perthshire, Scotland, on R. Erich, opposite to and part of Blairgowrie; flax and jute spinning.

Raunds, urb. dist., Northants, England, 16½ m. N.E. of Northampton; makes boots and shoes, especially for army. Pop. 3,700.

Raven'na. (1) Prov., Italy, bounded E. by Adriatic and W. by Bologna; fertile but marshy plain; drained by

R. Po di Primaro and intersected by canals; produces wheat, rice, hemp, chestnuts, and olive oil; manufactures of faience, glass, paper, silk, linen, and leather. Area, 715 sq. m.; pop. 267,000. (2) Cap. of above, 45 m. E. of Bologna; many fine churches, including the Basilica Ursiana (4th cent.), San Giovanni Evangelista (founded 425), and San Francesco (near which is tomb of Dante); mausoleum of Theodoric outside walls. Manufactures include silk and lace, paper and glass, agricultural implements and wine. Pop. 79,000.

Ravensburg, tn., Württemberg, Germany, on R. Schussen, 46 m. S.W. of Ulm; flax, cotton and linen goods, leather, machinery. Pop. 17,000.

Ravi. See INDUS.

Rawalpindi, tn., military station, Punjab, India, 90 m. E.S.E. of Peshawar; largest military station in India; protected by forts; arsenal and locomotive works; ironfounding, oil refining, and brewing. Pop. 102,000.

Rawdon, urb. dist., W. Riding, Yorks, England, 5 m. N.E. of Bradford; many country mansions in vicinity. Pop. 4,600.

Rawicz (*ra'vich*), Poland, 55 m. S.W. of Poznan; snuff, cigars, carpets, agricultural implements. Pop. c. 12,000.

Rawmarsh, tn., W. Riding, Yorkshire, England, 2 m. N. of Rotherham; steel and iron works, brickfields, potteries, collieries. Pop. 18,600.

Raw'tenstall, munic. bor., Lancashire, England, 8 m. N. of Bury; cotton, woollen, slipper and carpet-felt factories; coal mines and stone quarries. Pop. 28,600.

Rayleigh, urb. dist., Essex, England, 7 m. W.N.W. of Southend; moated mound near village is site of Sweyn's castle. Pop. 6,300.

Ré, ILE DE (*ēl de rā'*), isl., Charente-Inférieure, France, 2 m. off W. coast, opposite Rochelle; 15 m. long, 2 m. broad; area, c. 33 sq. m.; oyster culture and salt production. Chief town, St. Martin. Pop. 10,000.

Reading (*red'ing*). (1) Co. tn., Berks, England, 36 m. W. of London,

at junction of Rs. Kennet and Thames; univ.; agricultural produce; seeds; biscuits; engine works, breweries. Pop. 97,200. (2) City, Pennsylvania, U.S.A., on Schuylkill R., 30 m. n.w. of Philadelphia; important industrial centre; railway workshops, brick-works; manufactures include iron and steel, paper, cotton, hosiery. Pop. 110,000.

Recife (*rā-sē'fā*), or **PERNAMBUCO**, seapt., cap. of state of Pernambuco, Brazil, on Atlantic; partly on island connected with mainland by bridges. Railway terminus; palaces of governor and bishop; cottons, machinery, and glass; large export trade in cotton, sugar, rum, dyewoods, rubber, and cacao; improved harbour. Pop. 239,000.

Recklinghausen (*rek'ling-hou-zen*), town, Westphalia, Prussia, 15 m. N.N.E. of Essen; linen, beer, cement, and soap; coal mines and iron foundries. Pop. 84,000.

Reculver, vil., Kent, England, 8 m. w. of Margate; former Roman port; Roman remains; Reculver cliff is a noted sea-mark.

Redbourn, par. and vil., Herts, England, 4½ m. n.w. of St. Albans; on Roman Watling Street. Pop. (par.) 2,000.

Red'car, seaside resort, N. Riding, Yorks, England, 8 m. n.e. of Middlesbrough; fine stretch of sands. Race-course. Pop. 20,200.

Red'dish, par., Lancs, England, 5 m. s.e. of Manchester. Pop. 15,400.

Red'ditch, urb. dist., Worcestershire, England, 15 m. s. of Birmingham; needles, fishing tackle, pins, and motor engineering. Pop. 19,300.

Redesdale (*rēds'dāl*), the valley of R. Rede, a l. bk. trib. of N. Tyne, Northumberland, England, near s. end of which is the battlefield of Otterburn or Chevy Chase (1388).

Redhill. See **REIGATE**.

Red'lands, tn., California, U.S.A., 70 m. e. of Los Angeles; centre of important orange-growing dist.; citrus fruits; beautiful mountain scenery. Pop. 14,000.

Red River. (1) R. bk. trib. of R. Mississippi, U.S.A.; rises in n.w. Texas, flows between Texas and Oklahoma, and enters Mississippi 340 m. above Gulf of Mexico; middle basin fertile; lower course meandering and subject to floods; navigable, but sometimes obstructed by fallen trees. Length, c. 1,500 m. (2) Or **RED R. OF THE NORTH**, rises in Minnesota, U.S.A.; flows n. between Minnesota and N. Dakota into Manitoba (Canada) and enters L. Winnipeg; basin formerly a great lake (L. Agassiz), now a rich wheat region; chief tn., Winnipeg, at confluence of Assiniboine trib.; Red R. Settlement of Scots founded by Lord Selkirk (1811). Length, c. 700 m.

Redruth, mkt. tn., Cornwall, England, 9 m. w.s.w. of Truro; tin sales are held; breweries and railway works. Pop. 9,900.

Red Sea, inland sea separating n.e. Africa from Arabia. Gulfs of Aqaba and Suez in n. enclose peninsula of Sinai; in s. Strait of Bab-el-Mandeb connects with Indian Ocean; greatest depth is c. 1,200 fathoms, and average depth is 250 fathoms; islands and coral reefs are numerous; heavy gales, variable winds, and intense heat make navigation difficult. Seaports (Arabian coast): Mocha, Hodeida, Jidda; (African coast): Suez, El Qoseir, Suakin, and Massawa. Length, c. 1,300 m.; maximum breadth, c. 250 m.

Re'gensburg, or **RATISBON**, city, Bavaria, Germany, on R. Danube; exceptionally rich in mediæval remains and works of art; Gothic cathedral (1275); tobacco, furniture, musical instruments, pottery, boats, pencils, and soap. Pop. 77,000.

Reggio di Calabria (*rej'ō dē ha-lab'-rē-a*), tn., Italy, on Strait of Messina; seat of archbishop; fine cathedral; perfumes, silks, and terra-cotta; exports olive oil, dried fruits, and essences. Enormous damage by earthquakes in 1783, 1894, and Dec. 1908. Pop. 59,000.

Reggio nell' Emilia (*rej'ō nel em-ē'-lē-a*), city, Italy, 35 m. n.w. of Bo-

logna; seat of bishop; cathedral and numerous churches; manufactures include locomotives, tramcars, and cheese. Pop. 83,000.

Regina (*re-jī'na*), cap., Saskatchewan, Canada, 357 m. w. of Winnipeg; provincial legislative buildings, city hall, and various educational establishments. Western headquarters of Royal Canadian Mounted Police; wholesale distributing centre; foundries and machine shops, oil works, timber mills. Pop. 37,000.

Reichenbach (*rīch'en-bāch*). (1) Tn., Saxony, Germany, 11 m. s.w. of Zwickau; wool spinning, carding, and dyeing; school of weaving. Pop. 31,000. (2) Tn., Silesia, Prussia, 30 m. s.w. of Breslau; dyeing, brewing, chemicals. Pop. 16,000.

Reichenberg. See **LIBEREC**.

Reigate (*rī'gāt*), mkt. tn., Surrey, England, 23 m. s. of London; Church of St. Mary, partly Norman, with tomb of Lord Howard of Effingham; Redhill, a modern town, on E., is continuous with and included in borough. Pop. 30,800.

Reims, or RHEIMS (*rēms* or *rans*), tn., Marne, France, 85 m. E.N.E. of Paris. Was prosperous town when Cæsar invaded Gaul. French kings crowned here; associated with Joan of Arc. Cathedral of Notre Dame (begun 1212), one of finest Gothic edifices in Europe, suffered severely in Great War, but afterwards restored. Important woolen and wool-and-silk manufactures; also glass, linoleum, chemicals, machinery, paper manufactured; headquarters of champagne industry. Important rly. jn. Pop. 98,000.

Remiremont (*rā-mīr-mon'*), town, Vosges, France, on R. Moselle; cotton spinning and weaving; manufactures hosiery, iron and copper goods, and brushes. Pop. 8,000.

Reimscheid (*rem'shīt*), tn., Rhine prov., Prussia, 6 m. s. of Barmen; centre of cutlery trade; enormous export of locks, saws, scythes, skates, tools. Pop. 77,000.

Renaix (*re-nā'*), tn., E. Flanders, Belgium, 8 m. s. of Oudenarde;

woollen and linen goods. Pop. 23,000.

Rends'burg, tn., Schleswig-Holstein, Prussia, on Kiel Canal, 20 m. w. of Kiel; breweries, tanneries, and dyeworks; textiles and manures. Pop. 17,000.

Ren'frew. (1) Royal burgh and co. tn., Renfrewshire, Scotland, on R. Clyde; shipbuilding yards, largest boiler works in Britain; engineering, weaving, and manufacture of soap. Pop. 15,000. (2) Tn., Ontario, Canada, 50 m. w. of Ottawa. Pop. 5,250.

Ren'frewshire, co., s.w. Scotland, lying along R. Clyde; surface flat in N.E., rising to high moorland in w. and s.; agriculture, dairy farming, and stock raising carried on; produces coal, iron, and shale; manufactures thread, cotton, and chemicals; has shipbuilding, engineering, sugar refining, print and bleach works; chief towns, Renfrew, Paisley, Greenock, Gourock, and Port-Glasgow. Area, 237 sq. m.; pop. 288,600.

Rennes (*ren*), chief tn., Ille-et-Vilaine, France, at junction of Rs. Ille and Vilaine; anc. cap. of Brittany; archiepsc. see; univ.; dairy produce; manufactures sailcloth, table linen, leather, and agricultural implements. Pop. 74,000.

Re'no, tn., Nevada, U.S.A., 30 m. N. of Carson City; agricultural and mining centre; univ.; machinery and flour. Pop. 11,000.

Rensselaer (*rens'ler*), tn., New York, U.S.A., on Hudson R. opposite Albany; manufacturing and railway centre; chief manufactures, felt, shoddy, blankets, and chemicals. Pop. 11,000.

Ren'ton, tn., Dumbartonshire, Scotland, on R. Leven, 2 m. N. of Dumbarton; calico printing, bleaching, dyeing. Pop. 5,000.

Rep'ton, par. and vil., Derbyshire, England, 4 m. N.E. of Burton-on-Trent; famous school; anc. cap. of Mercia; church has Saxon crypt. Pop. (par.) 1,900.

Requena (*rā-kān'ya*), tn., E. Spain, 40 m. w. of Valencia; wine and

fruits; manufactures taffetas and velvets. Pop. 20,000.

Resht, tn., Gilan, Persia; Pahlevi, its port, is 18 m. n.w. on the Caspian Sea; centre of important trade routes; trades chiefly in rice and silk. Pop. 80,000.

Restigouche (*rest'i-goosh*), riv., between New Brunswick and Quebec, Canada; flows into Bay of Chaleur; lumbering; salmon fishing.

Ret'ford, EAST, mkt. tn., Notts, England, on R. Idle and Chesterfield Canal, 22 m. E.S.E. of Sheffield; iron foundries, paper and corn mills, india-rubber works. Pop. 14,200.

Rethel (*rè-tel'*), tn., Ardennes, France, on R. Aisne; fine woollen cloth. Pop. 5,000.

Réunion (*rè-in'yon*) (or **BOURBON**), French isl., Indian Ocean, c. 400 m. E. of Madagascar; divided by chain of volcanic mts. into two distinct E. and W. parts; drained by many short streams; chief products are rum, sugar, coffee, manioc, tapioca, vanilla, and spices. Chief tns., St. Denis (cap.) and Pointe des Galets (chief port). Area, 970 sq. m.; pop. 187,000.

Reus (*rè-ooz'*), tn., E. Spain, 10 m. n.w. of Tarragona; silk, calico, soap, and leather; exports fruit and wines. Pop. 30,000.

Reutlingen (*roit-lin'gen*), tn., Württemberg, Germany, 20 m. S. of Stuttgart; centre of hop, wine, and fruit dist.; leather, woollen and cotton goods, machinery. Pop. 30,000.

Revel. See **TALLINN**.

Rev'elstoke, tn., S.E. Brit. Columbia, Canada, on Columbia R. and C.P.R.; mining industries, railway workshops. Pop. 3,000.

Revere (*re-vèr'*), tn., Massachusetts, U.S.A., N.E. and adjoining Boston; popular seaside resort. Pop. 36,000.

Rewah (*re'wah*). (1) Indian state, Baghelkhand, Central India; well watered and very fertile, producing rice, wheat, millet, and timber; rich in minerals, particularly coal. Area, 13,000 sq. m.; pop. 1,401,000. (2) Chief tn. of above, 72 m. S.W. of Allahabad. Pop. 21,000.

Re'wa Kan'tha, political agency, Bombay, India; comprises about sixty separate states in Gujarat. Area, 4,946 sq. m.; pop. 665,000.

Reykjavik (*rik'yá-vik*), cap. of Iceland; contains cathedral and government buildings; exports are salt cod and other fish, wool, and skins. Pop. 25,000.

Res'ekna, tn., Latvia, on Leningrad-Warsaw railway; agricultural centre. Pop. c. 20,000.

Rhætian Alps (*râ'ti-an* or *rêsh'i-an*), or **BERNINA ALPS**, central chain of Middle Alps, between Rs. Inn, Adda, and Upper Adige. Highest peaks: Piz Bernina (13,300 ft.), Piz Roseg (12,936 ft.), and Ortler Spitze (12,800 ft.). Chief pass is the Splügen (6,945 ft.).

Rhayader, mkt. tn., Radnorshire, Wales, on upper course of R. Wye; centre for tourists and anglers; tan-yards; sheep and cattle fairs. Pop. 5,000.

Rhé, ILE DE. See **RÉ**.

Rheims. See **REIMS**.

Rhenish Prussia. See under **RHINE PROVINCE**.

Rheydt (*rîf*), tn., Rhineland, Prussia, 19 m. W. of Düsseldorf; textiles, machinery, shoes, soap, and tobacco. Pop. 45,000.

Rhine (*rin*) (Ger. *Rhein*), riv., W. Europe; rises in Switzerland, where two streams, the Hinter Rhein and the Vorder Rhein, unite at Reichenau to form the main stream; after passing through L. Constance forms falls at Schaffhausen; forms boundary between Switzerland and Austria, between Switzerland and Germany, and between France and Germany. Chief tribs. are Aar, Ill, Neckar, Main, Lahn, Moselle, Ruhr, Lippe; total length, 760 m., over 500 navigable to Basle; connected by canals with Rs. Danube, Rhone, and Marne, and also with Zuider Zee; most picturesque part is between Bingen and Coblenz, with many anc. castles, most famous being Ehrenbreitstein, immediately opposite the confluence of R. Moselle. From Cologne to its mouth the river

passes through flat country, and on its way through Holland divides into several arms; the left or s. arm, which falls into the North Sea at the Hook of Holland, is known as the Waal, which farther on receives the Maas; the right or n. arm splits up into the IJssel and the Rijn. For commercial purposes the most important arms of the delta are the Waal and the Lek. The Rhine has always played an important part in history, romance, literature, and commerce. By Treaty of Versailles (1919) river navigation was placed under control of the International Rhine Commission.

Rhine Province, RHINELAND, or RHENISH PRUSSIA, the most w. province of Prussia; drained by R. Rhine and tribs.; wine extensively produced in the valleys of Rs. Rhine, Moselle, and Saar; sugar, hops, and flax grown; fruit abundant; most important occupations are mining and manufacturing; chief minerals, coal, iron, and lead; manufactures include iron, brass, and steel goods, cutlery, textiles, chemicals; chief tns. are Coblenz (cap.), Essen, Duisburg, Düsseldorf, Cologne, Elberfeld-Barmen, Crefeld. Area, 9,478 sq. m.; pop. 7,257,000.

Rhins (*riins*) (Gaelic 'point' or 'promontory'). (1) RHINNS, or RINNS OF GALLOWAY, low-lying dist., w. Wigtownshire, Scotland; extends from Corsewall Point to Mull of Galloway. Area, 120 sq. m. (2) RHINNS, or RHYNNIS OF Kells, range of mts., n.w. Kirkcudbrightshire, Scotland; highest peak Corserine (2,668 ft.). (3) THE RHINNS, peninsula, s.w. Islay, Argyllshire, Scotland.

Rho-Lingga (*rê-o-ling'ga*), archipelago, Dutch E. Indies; consists of five groups of islands, of which Lingga group lies on the equator; others are Karimon, Batam, Bintang, and Singkep groups; products include rubber, pepper, and rice. Area, 12,506 sq. m.; pop. 223,000.

Rhode Island, New England state, U.S.A., bounded n. and e. by Massachusetts, on s. by Atlantic Ocean, on

w. by Connecticut. Surface generally hilly; divided into two unequal portions by Narragansett Bay, with islands including Rhode I. (summer resort); numerous lakes; watered by Blackstone, Pawtuxet, and Pawcatuck rivs. Climate fairly equable. Mean ann. rainfall is 45 to 50 in. Fisheries (oysters) very important; agriculture is relatively unimportant. Pre-eminently a manufacturing state; chief industries: woollen, worsted, and felt goods, cotton goods, jewellery, foundry and machine-shop products, electrical machinery, silverware and plated goods, gold and silver refining. Chief towns, Providence (cap.), Pawtucket, Woonsocket, Newport. Area, 1,300 sq. m. (smallest state in the Union); pop. 679,000.

Rhodes (*rôds*), island; most e. of Aegean Islands; crossed by mountains from n. to s.; highest point, 4,560 ft.; fine climate and fertile soil; produces figs, pomegranates, oranges, and grapes. Cap. Rhodes. Area, 540 sq. m.; pop. 45,000.

Rhodesia (*rô-desh'i-a*), Brit. terr., S. Africa; bounded n. by Belgian Congo and Tanganyika Terr., e. by Nyasaland and Portuguese E. Africa, s. by Transvaal, w. by Bechuanaland, Angola, and Belgian Congo; divided into Northern and Southern Rhodesia by R. Zambezi. Originally governed by British South Africa Co., founded by Cecil Rhodes (1889); in 1922 declined an offer to join the Union of S. Africa; S. Rhodesia was granted responsible govt. in 1923, and N. Rhodesia passed under the direct control of the British Crown in 1924.

SOUTHERN RHODESIA, Brit. Dominion; mainly an elevated plateau (alt. 3,000 to 5,000 ft.); drained to R. Zambezi in n., to R. Limpopo in s.; climate sub-tropical; tableland healthy, riv. valleys and lowlands unhealthy; rainy season between Oct. and April; chief crops, tobacco and maize; citrus fruit orchards; numerous cattle and dairy products; minerals include gold, asbestos, chrome iron, coal; riv. from Union divides at

Bulawayo, one line N. to Zambezi and N. Rhodesia, other by Salisbury (cap.) to Beira in Portuguese E. Africa. Includes Matabeleland and Mashonaland. Area, 150,344 sq. m.; pop. c. 1,000,000 (45,000 Europeans).

NORTHERN RHODESIA, Brit. Protectorate; plateau surface (alt. 3,000 to 4,500 ft.) rising to over 5,000 ft. in N.E., with climate suited to Europeans; drained by R. Zambezi and R. Congo; includes L. Bangweulu and part of Ls. Tanganyika and Mweru; timber; principal crops, maize, tobacco, cotton, sisal, oil-seeds, millet, wheat; citrus fruits on irrigated lands; cattle; much mineral wealth, coal, copper, zinc, lead, and vanadium; traversed by rly. to Belgian Congo; rvs. navigable for considerable distances. Cap. Livingstone. Area, 287,950 sq. m.; pop. 1,270,000 (7,600 Europeans).

Rhodope Mountains (*rô'dô-pâ*), part of Balkan Mts., dividing Macedonia from Thrace. Muss Alla (9,615 ft.), culminating point in w. portion.

Rhondda (*ron'tha*), urb. dist., Glamorganshire, Wales, watered by Rhondda R., trib. of Taff; valley densely populated and rich in coal. Pop. 141,300.

Rhone (*rôn*), riv., swiftest and second longest of France, rises in Switzerland on w. slopes of Mt. St. Gothard, flows into and through L. Geneva, enters France 12 m. S. of Geneva, and flows W. to Lyons, where it is joined by the Saône, then S. to Mediterranean, discharging by La Camargue delta into Gulf of Lions; chief tribs., Ain, Saône, Arve, Isère, Drôme, Durance; strong current prevents navigation above Lyons; canals connect Rhone with Loire, Seine, Rhine, and Moselle; length, 500 m., of which 45 are in Lake Geneva.

Rhône (*rôn*), dep., S.E. France, along r. bk. of Middle Rhone and Lower Saône; soil moderately fertile; wheat, oats, rye, potatoes, and wine are chief agricultural products; silk and textile industries are important; copper, coal, manganese, and iron are worked.

Chief tn., Lyons. Area, 1,104 sq. m.; pop. 994,000.

Rhu, or Row (*roo*), vil., Dumbartonshire, Scotland, on S.E. shore of Gareloch; summer resort. Pop. 1,200.

Rhyl (*rîl*), wat.-pl., Flintshire, Wales, near mouth of R. Clwyd. Pop. 13,500.

Rhymney (*rîm'ni*), urb. dist., Monmouthshire, England, 2½ m. W. of Tredegar; ironworks, collieries. Pop. 10,500.

Rib'ble, riv., England; rises in Pennine chain; flows W. through Yorkshire and Lancashire to Irish Sea; estuary 5½ m. wide between Southport and Lytham. Chief tn. on banks, Preston. Length, 75 m.

Rib'chester, par. and town, Lancashire, England, on R. Ribble; anc. Roman station. Pop. (par.) 1,400.

Ribeira (*rê-bâ-ê-râ*), tn., Spain, 64 m. S.S.W. of Corunna; its port is Santa Eugenia de Ribeira. Pop. 16,000.

Ris'carton, par. and vil., Ayrshire, Scotland; par. contains greater part of tn. of Hurlford; vil. adjoins Kilmarnock; coal mining. Pop. (par.) 8,000.

Rich'borough, port, Sandwich, Kent, England; important Roman remains; used during Great War as base for cross-Channel train-ferry service to Calais and Dunkirk. Port and equipment bought (1925) for development of Kent coalfields.

Rich'mond. (1) Mkt. tn., N. Riding, Yorks, England, on R. Swale; ruined castle (1071); agricultural produce. Pop. 4,800. (2) Munic. bor., Surrey, England, part of Greater London, on R. Thames and Richmond Hill; residential town and favourite resort; Richmond Park contains red deer; bor. includes Kew. Pop. 37,800. (3) Cap., Virginia, U.S.A., on James R.; many fine public buildings; leading industry tobacco production; lumber products, foundry and machine-shop products, carriages, and wagons. Cap. of Southern Confederacy and scene of much fighting during American Civil War. Pop. 183,000. (4) Cap., Wayne co., Indiana, U.S.A., 69 m. N.E. of Indianapolis; 'Quaker City of the

West'; agricultural machinery. Pop. 33,000.

Rickmansworth, urb. dist., s.w. Herts, England, on R. Colne; paper mills, breweries. Pop. 10,800.

Rideau Canal (*rē'dō*), canal, Ontario, Canada, connecting Kingston, L. Ontario, with Ottawa by way of Rideau R. and L. Rideau, thence N. to Ottawa R. Constructed as alternative route to that part of R. St. Lawrence which is shared with U.S.A.; length, 126½ m.

Riesa (*rē'za*), tn., Saxony, Germany, on R. Elbe; large harbour, sawmills, ironworks. Pop. 24,000.

Riesengebirge (*rē'sen-ge-bir'ga*), or GIANT MOUNTAINS, highest portion of Sudetic Mts., partly in Czechoslovakia and partly in Germany; 23 m. long and 13 to 15 m. wide; highest summit, Schneekoppe (5,258 ft.).

Rif. See under Morocco (1).

Riga (*rē'ga*), seapt., cap., Latvia, near mouth of R. Dvina; old castle; was member of Hanseatic League; harbour frozen for four months every year, but kept open by ice-breakers; exports corn, flax, hemp, timber, skins, linseed, eggs; manufactures include cottons, machinery, glass, paper; old town preserves mediæval aspect; new town has fine boulevards and buildings. Pop. 338,000.

Rigi (*rē'gē*), or RIGHT, mountain mass rising E. of Lucerne, Switzerland, between Lakes Lucerne and Zug; highest point, Rigi Kulm (5,906 ft.), crowned by a hotel; mountain railways from E. and S.

Rimini (*rē'mē-nē*), tn., Italy, on Adriatic, 70 m. S.E. of Bologna; Roman remains and fine cathedral; manufactures silk, rope, and sailcloth; bathing resort. Pop. 58,000.

Rimouski (*re-moos'kē*), port and wat.-pl., Quebec, Canada, on S. bank of Gulf of St. Lawrence, 180 m. N.E. of Quebec; port of call for ocean mails. Pop. 3,600.

Ringwood, mkt. tn., W. Hants, England, on R. Avon; agricultural trade, gloves, milling machinery. Pop. 5,100.

Riohamba (*rē'ō-bam'ba*), cap., Chim-

borazo prov., Ecuador, 85 m. N.E. of Guayaquil; alt. 9,000 ft.; cathedral; national college. Pop. c. 12,000.

Rio Cuarto (*rē'ō kuv'r'tō*), tn., Cordoba prov., Argentina, S. America, on Andine Rly.; of great strategical importance; has arsenal. Pop. 18,000.

Rio de Janeiro (*rē'ō dā zhan-ā-rō*).

(1) Maritime state, Brazil; interior mountainous; drained by R. Parahyba; coffee, sugar, tobacco, cotton, manioc, and fruits grown. Cap. Nitheroy. Area, 26,627 sq. m.; pop. 1,560,000. (2) Cap. of Brazil, second largest city of S. America, on bay of same name; important seapt.; beautifully situated; defended by forts at harbour entrance; regular steamship connections with European and American ports. Botanical and zoological gardens; aerial railway to top of Sugar Loaf hill (1,260 ft.); many notable buildings and educational institutions. Flour mills, foundries, breweries, sugar refineries; railway workshops and rubber factory. Harbour continuously improved since 1904. Exports include coffee, sugar, hides, ores, and diamonds. Pop. 1,158,000.

Ri'ō de O'ro and Ad'rar, Span. possession, W. Africa, extending from Cape Bojador along Atlantic Ocean to Cape Blanco (400 m.); occupies strip of W. Sahara (average breadth, 170 m.); fishing. Area, 109,200 sq. m.; pop. c. 100,000 (including 500 Europeans).

Rio Grande del Norte (*rē'ō gran'dā del nor'tā*), riv., N. America; rises in mountains of southern Colorado, flows S. and S.E. through New Mexico, and thence south-eastward between Texas and Mexico to Gulf of Mexico; owing to silting in lower part of its course it is of little use for navigation; is much used for irrigation.

Rio Grande do Norte (*rē'ō grān'dā dô nor'tā*), state, N.E. Brazil, S. America; lies behind Cape San Roque; interior mountainous; cattle raising; sugar, cotton, cereals, salt; rly. to Pernambuco from Natal (cap.). Area, 20,231 sq. m.; pop. (est.) 667,000.

Rio Grande do Sul (*riô gran'dã dô sool*). (1) Most southerly state, Brazil, lying between Atlantic and Uruguay R.; plateau in n., grass-covered plains in s. Soil is fertile; pastures of s. and s.w. given up to rearing of cattle, horses, and sheep, the principal exports being hides, horse-hair, bones, tallow, and preserved meat. Cereals, vegetables, fruit, coffee, and sugarcane are grown. Minerals include copper, iron, and gold. Chief tns., Porto Alegre and Rio Grande do Sul. Area, 91,310 sq. m.; pop. 2,183,000. (2) Or RIO GRANDE, scapt. in above, Brazil, at entrance to Lagos do Patos; wireless station; extensive harbour works; cloth, rugs, leather, and beer; exports hides, dried beef, wool, and hair. Pop. 53,000.

Rio Muni. See SPANISH GUINEA.

Rio Negro (*riô nã'grô*). (1) Terr. of Argentine Republic, forming part of Patagonia; bounded on n. by Rio Colorado, e. by Atlantic Ocean, s. by Chubut, w. by Chile; soil is generally fertile; leading industry is stock raising. Cap. Viedma. Area, 79,805 sq. m.; pop. 42,000. (2) L. bk. trib. of R. Amazon, S. America; rises as R. Guainia in s.e. Colombia, between which and Venezuela it forms boundary before flowing s. into Brazil; enters R. Amazon 12 m. below Manaos; in upper course Cassiquiare trib. links Rio Negro with Orinoco R.; navigable for steamers to Santa Isabel, 420 m. above Manaos. Length, c. 1,350 m.

Rio Tin'to, tn., s. Spain, 50 m. N.N.E. of its port, Huelva; in rich copper-mining dist. worked since Phœnician and Roman times. Pop. 10,000.

Rip'ley, mkt. tn., Derbyshire, England, 10 m. n. of Derby; agricultural machinery; ironworks and collieries. Pop. 13,400.

Rip'on, munic. bor., W. Riding, Yorks, England, on R. Ure, 30 m. n. of Leeds; cathedral (12th and 13th centuries); leather goods. Pop. 8,600.

Ris'ca urb. dist., Monmouthshire,

England, on R. Ebbw, 6½ m. N.W. of Newport; collieries. Pop. 16,600.

Rish'ton, urb. dist., Lancs, England, 3 m. N.E. of Blackburn, on Leeds and Liverpool Canal; cotton and paper mills. Pop. 6,600.

Rive-de-Gier (*riw-de-shê-âr*), tn., Loire, France, 13 m. N.E. of St. Etienne; coal-mining centre; iron, steel, and glass works; steam-engines and silk. Pop. 16,000.

Riverin'a, tract of pastoral country, New South Wales, between rivers Lachlan-Murrumbidgee and Murray; important sheep-farming area; soil is fertile, producing much wheat and fruit; agriculture is being steadily developed by irrigation; minerals include gold and coal. Chief towns are Albury and Wagga Wagga. Area, c. 26,600 sq. m.; pop. c. 71,000.

Riv'erside, city, California, U.S.A., 50 m. E. by s. of Los Angeles; residential city; grain, dairy produce, and poultry; state horticultural experiment station; oranges and lemons. Pop. 31,000.

Riviera (*riw-ri-â'ra*), narrow strip of coast on Gulf of Genoa, between Nice and Spezia; mild winters and fine scenery make it celebrated holiday resort. Towns include Pegli, San Remo, Ospedaletti, Bordighera, Mentone, Monte Carlo, Monaco, and Nice. Vegetation luxuriant and even sub-tropical.

Riyadh (*riw-âd'*), city, Nejd, Arabia; situated on oasis of same name; cap. of Nejd. Pop. c. 30,000.

Roanne (*riw-ân'*), tn., Loire, France, at head of navigation on R. Loire, 54 m. N.W. of Lyons; transit trade; cotton, woollen, and silk manufactures. Pop. 36,000.

Roanoke (*riw-an-ôk'*), city, Virginia, U.S.A., 175 m. W.S.W. of Richmond; in valley between Blue Mts. and Alleghanies; railway repair shops, bridge and structural ironworks, smelters. Pop. 69,000.

Robin Hood's Bay, fishing tn. and seaside resort, N. Riding, Yorks, on lofty cliffs encircling fine bay, 5 m. S.E. of Whitby.

Roch'dale, co. bor., Lancs, England, 11 m. N.E. of Manchester; woollens, cottons, plush velvet; ironworks and machine factories. Pop. 90,300.

Rochefort (*rôsh-fôr*), tn., Charente-Inferieure, France, on R. Charente, 20 m. S.S.E. of La Rochelle; ship-building and cannon founding, manufacture of bricks and tiles; trade in salt, timber, oysters, and colonial wares. Pop. 24,000.

Rochelle, LA. See LA ROCHELLE.

Roch'ester. (1) Seapt., Kent, England, on R. Medway; continuous with Chatham on E., and opposite Strood; agricultural implements; brick and cement works, oil mills, and oyster fisheries. Cathedral founded by Ethelbert c. 604. Many associations with Dickens. Pop. 31,200. (2) City, New York, U.S.A., 6 m. S. of Lake Ontario, on Genesee R. River cuts gorge through centre of city; three falls within city limits. Imposing city buildings; univ.; water-power and flour-milling centre; electrical machinery and tools, photographic materials; nursery centre for fruit and ornamental trees. Pop. 325,000.

Rock'ford, tn., Essex, England, 3 m. N. of Southend; agricultural trade. Pop. 2,100.

Rock'ford, city, Illinois, U.S.A., 82 m. N.W. of Chicago, on both sides of Rock R.; furniture, milling tools, lathes, farm machinery, bolts and locks, watches, woollens. Pop. 86,000.

Rockhampton, seapt., Queensland, Australia, on Fitzroy R., 42 m. from mouth. Gold, silver, copper, coal, iron, and precious stones are mined; meat preserving. Pop. 30,000.

Rock Island, city, Illinois, U.S.A., 180 m. S.W. of Chicago, on Mississippi R. Arsenal with extensive workshops and armoury. Lumber products, agricultural implements. Coal mined in vicinity. Pop. 39,000.

Rocky Mountains, great complex system of parallel mountain ranges in N. America; extends from Alaska to Mexico; name strictly applies only to most easterly of Cordilleran ranges, other ranges being known as Selkirk

Mts. and Coast Range in British Columbia, Cascade Range and Sierra Nevada in U.S.A.; highest peaks are in Alaska—Mt. McKinley (20,300 ft.), Mt. St. Elias (18,100 ft.); many peaks exceed 14,000 ft.; system is source of almost all the large rivers of N. America; great cañons cut across outer barriers by the main rivers, most notable is Grand Cañon of the Colorado; numerous glaciers, chiefly in Canada and Alaska; best known passes (Yellowhead, Kicking Horse, Crow's Nest, Lewis and Clark's, Hagerman, Marshall) are traversed by the great transcontinental railway lines. Chief mineral resources are gold, silver, lead, copper, coal; as a rule, agriculture is profitable only in the valleys capable of irrigation; higher valleys and mountain slopes are grazing lands of great value; western ranges are heavily timbered. First formal exploration was by Lewis and Clark in 1804, and since 1840 numerous expeditions have been organized.

Rodez (*rô-dâ*), chief tn., Aveyron, s. France, on R. Aveyron, 85 m. N.W. of Montpellier; on high river bluff crowned by a Gothic cathedral (1274-1535); 15th and 16th cent. houses; woollens, serge, and straw hats; Roman aqueduct. Pop. 11,000.

Rodos'to, tn., Turkey, on European side of Sea of Marmara, 80 m. W. of Constantinople; excellent roadstead; canary seed, grain, silkworms, vegetables, and grapes. Pop. 35,000.

Rodriguez (*rô-dre'gâz*), Brit. isl., Indian Ocean, 370 m. E. of Mauritius, of which it is a dependency. Very fertile; grain, sugar, rice, cotton, coffee, tobacco, fruits, and woods. Station of 'All-British' cable between S. Africa and Australia. Area, 42 sq. m.; pop. 7,000.

Roermond (*roor'mont*), tn., Holland, on R. Maas, 29 m. N.N.E. of Maastricht; 13th cent. church; woollens, cottons, silks, paper, beer. Pop. 17,000.

Roeskilde. See ROSKILDE.

Rohilkhand, div. of United Provinces, India, having Ganges on W. and S., and Himalayas on N. and N.E.

Chief tn., Bareilly. Area, 10,828 sq. m.; pop. 5,200,000.

Roh'tak, tn., Punjab, India, 42 m. n.w. of Delhi; cotton turbans. Pop. 25,000.

Român, tn., Romania, 35 m. s.w. of Jassy; famous cathedral (1541); fine bridge; seat of Gr. bishop. Pop. 25,000.

Roman'ia, kingdom, s.e. Europe; bounded n. by Czechoslovakia, Poland, and Ukraine, e. by Black Sea, s. by Bulgaria, w. by Yugoslavia and Hungary; surface rises from plain of R. Danube to Carpathian Mts.; includes Moldavian valley, highlands of Bukovina, Dobruja steppe, the low-lying dist. of Bessarabia, between the Dniester and Prut rivers, and Transylvania w. of Carpathian Mts. Drainage is to R. Danube, which forms s. frontier for part of its course; chief tribes are Muresul (Maros), Oltul, Siret (Sereth), and Prut; R. Danube is navigable, the Sulina distributary being dredged to the Black Sea; navigation impeded by ice in winter, and by low water in summer. Climate extreme; mean annual rainfall is c. 25 in. Agriculture is very important; chief grain crops are wheat, maize, barley, oats, rye, and millet; other products are sugar, tobacco, flax, hemp, fruit (including grapes). Pastoral occupations are also largely followed. Forests cover c. 17,000,000 acres, resinous woods and beech predominating. Carpathians and Transylvania are rich in minerals; petroleum, coal, iron, copper, and salt are worked, and the mining industry is being rapidly developed. Chief industries are petroleum refining, flour milling, brewing, and distilling. Chief tns., Bucharest (cap.), Chisinau, Cernauti, Ismail, Jassy, Galatz, and Timisoara. Area, 122,282 sq. m.; pop. 17,400,000.

Romans (*ro-mon'*), tn., Drome, s. France, on R. Isère; bootmaking, distilling, oil refining. Pop. 15,000.

Rome. (1) Famous city, seat of the papal court, cap. of Italy, on R. Tiber, 15 m. from its mouth; noted for its

vast ruins and glorious monuments. R. Tiber is spanned by twelve bridges, most of them of anc. origin. Rome was not only the cap. of the vast Roman Empire, but was also for centuries the great religious centre of the world, and is still the headquarters of the Roman Catholic Church. The cathedral of St. Peter's is the largest church in the world. Other interesting churches are San Giovanni, San Paolo, San Lorenzo, Santa Maria Maggiore (one of the oldest churches in Rome, containing magnificent frescoes), Santa Maria del Popolo (with chapel by Raphael), the Gesù or Jesuit Church, containing the tomb of Ignatius Loyola, and Santa Maria del Rotonda (the anc. Pantheon). Among the great palaces are the Vatican (residence of the Pope), and the Quirinal (residence of the king). Others are the Lateran (also belonging to the Pope), with a large sculpture gallery, a picture gallery, and museum of Christian antiquities; Palazzo di Venezia, Palazzo Borghese, and the villas Medici and Borghese. Among noteworthy modern buildings are the famous national library, the Biblioteca Nazionale Centrale Vittorio Emanuele (founded 1875; 850,000 vols.). Many remains of anc. Rome—the Pantheon; Roman forum; temples of Concord, Vespasian, and Saturn; Carcer Mamertinus, said to have been the prison of St. Peter; Cloaca Maxima; temples of Castor and Pollux and of Vesta; Arch of Titus, with sculptures illustrating the capture of Jerusalem and showing the seven-branched golden candlestick; and the Colosseum, a circus built A.D. 80 by Titus, capable of seating 50,000 spectators, and with a circuit of 573 yds. No manufactures of importance are carried on in Rome. Since 1929 the Pope has been recognized as full and independent sovereign of the Holy See in the City of the Vatican, that part of Rome comprising the Vatican and Lateran palaces with their grounds, and the villa of Castel Gandolfo. Pop. c. 900,000. (2) City, New York, U.S.A.,

on Mohawk R.; manufacturing centre; brass and copper works. Pop. 32,000. (3) City, Georgia, U.S.A., 60 m. N.W. of Atlanta, at head of Coosa R.; cotton mills and presses, mining machinery. Pop. 13,000.

Romford (*rum'furd*), mkt. tn., Essex, England, 12 m. N.E. of London; iron-works and electrical engineering. Pop. 35,900.

Romiley, par. in urb. dist. of Bredbury and Romiley, Cheshire, England, 3 m. N.E. of Stockport; cotton industries; hat making. Pop. (par.) 3,810; (urb. dist.) 9,200.

Romney (*rum'n*), New, tn., s. Kent, England; was one of Cinque ports; now more than a mile from the sea; charters, etc., of Cinque ports kept here; sheep fairs. Pop. 1,600. Old Romney lies 2 m. W. by N.

Romsdal, valley of R. Rauma, Norway; celebrated for its scenery; notable peaks, Romsdalshorn (5,100 ft.), Trolldinder (6,010 ft.); Virmafos waterfall nearly 1,000 ft. high; Romsdal Fjord on W. coast.

Romsey (*rum'si*), mkt. tn., Hants, England, 10 m. N.W. of Southampton; fine Norman church; manufactures paper and leather. Pop. 4,900.

Ronaldsay (*ron'al-sā*). (1) North, most northerly of Orkney Islands, Scotland, separated from Sanday by the dangerous N. Ronaldsay Firth; N. Ronaldsay lighthouse 140 ft. high; surface low and flat. Area, 4 sq. m.; pop. 350. (2) South, most southerly of Orkney Islands, Scotland, 6 m. N.N.E. of Duncansby Head; well cultivated. Area (with small adjacent islands), 18 sq. m.; pop. 1,500.

Roncesvalles (*ron-thés-val'yéz*; French *rôns-vail*), vil. in Pyrenees, Navarre, Spain; abbey and 13th cent. church; near is the famous pass where rear-guard of Charlemagne's army was defeated, and Roland was killed (778).

Ron'da, tn., s. Spain, on R. Guadaro, 44 m. W. of Malaga; old tn. separated from new by deep gorge; Roman and Moorish remains; famous

bull-fights; soap, hats, leather, wines. Pop. 30,000.

Roor'kee, tn., United Provinces, India, 55 m. N. of Meerut; has Thomason Engineering Coll. Pop. 17,000.

Ror'schach, wat.-pl., St. Gall, Switzerland, on Lake Constance; grain, lace. Pop. 11,000.

Ro'sa, MONTE, mt. mass between Switzerland and Italy, S.E. of Zermatt; has ten peaks, highest Dufourspitze (15,217 ft.).

Rosario, tn., Santa Fé, Argentina, S. America, on R. Paraná; terminus of four railways; commercial centre; exports grain and hides; sugar refineries, flour mills, and breweries. Pop. 265,000.

Roscom'mon. (1) Inland co., Connaught, I.F.S., on central limestone plain; surface level or undulating; hills on N. (Mt. Cashel, 1,377 ft.); chief rvs.: Shannon (with loughs Allen, Boderg, and Ree) and Suck; agriculture; extensive grazing on 'Plain of Boyle'; some coal, iron, and marble; interesting antiquities. Area, 950 sq. m.; pop. 83,600. (2) Co. tn. of above; cattle trade; mediaeval castle. Pop. 1,800.

Roscrea (*ros-crā*), mkt. tn., N. Tipperary, I.F.S.; church part of 11th cent. abbey; flour mills, agricultural centre. Pop. 2,800.

Roseneath, vil. and par., Dumbartonshire, Scotland, on Gareloch; has Princess Louise Home for Invalid Soldiers; castle a seat of Duke of Argyll. Pop. (par.) 2,700.

Ros'enheim, wat.-pl., Bavaria, Germany, on R. Inn, 40 m. S.E. of Munich; saline and sulphur baths; cement and salt works. Pop. 18,000.

Roset'ta, tn., Egypt, at one of the mouths of R. Nile; formerly a seaport, but now of little importance; rice market. The Rosetta stone, discovered in 1799, furnished key to interpretation of Egyptian hieroglyphics. Pop. 27,000.

Roskilde (*ros'hil-de*), or ROESKILDE, tn., isl. of Zealand, Denmark, on Roskilde Fjord, 20 m. W. of Copenhagen;

cap. of Denmark before 1443; has 11th cent. cathedral. Pop. 13,000.

Ros'lin, or **ROSSLYN**, vil. and par., Midlothian, Scotland, on riv. N. Esk, 6 m. s. of Edinburgh; has ruined castle and highly decorated 15th cent. chapel with famous 'Prentice Pillar'; bleach fields, gunpowder factory. Pop. 1,100.

Ross, mkt. tn., Herefordshire, England, on R. Wye; corn mills, agricultural implement works. Pop. 4,700.

Ross and Crom'arty, co., Scotland, stretching across Scotland from Moray Firth on E. and including Lewis in Outer Hebrides; two counties united (1889); surface wild and mountainous, dotted with lakes, of which largest is Loch Maree (13 m. long, with thirty islands); chief mountain peaks, Carn Elge (3,877 ft.), Mam Soul, Ben Attow (near which are Falls of Glomach, 370 ft.), Ben Wyvis. Coasts much indented, having Dornoch Firth, Cromarty Firth, and Beaully Firth on E., and Lochs Broom, Ewe, Gair, Torridon, Carron, and Alsh on W.; industries: agriculture (mainly in Black Isle dist. between Dornoch and Cromarty Firths), sheep farming, salmon and sea fishing, and distilling. Co. tn., Dingwall. Area, 3,089 sq. m.; pop. 62,800.

Rossan'o, city, Italy, on S. coast of Gulf of Taranto; archiepsc. see; cathedral and castle; olive oil and silk manufactures; marble and alabaster quarries. Pop. 16,000.

Rosslare (*ros-lár*), vil. and par., Wexford, I.F.S., 6 m. S.E. of Wexford; packet station for steamers from Fishguard, Wales (55 m.). Pop. (par.) 670.

Rosstrev'vor, seaport and wat.-pl., co. Down, N. Ireland, in lee of Mourne Mts. Pop. 750.

Ros'tock, tn., Mecklenburg-Schwerin, Germany, on R. Warnow; important Baltic port; univ. (1419), 12th cent. church (St. Peter's), and palace; commercial centre; fisheries; manufactures machinery, sugar, chemicals; exports grain. Pop. 70,000.

Rostov, tn., Yaroslav prov., Russia,

120 m. N.E. of Moscow; church (1230); fisheries, market gardens; manufactures textiles, tallow products, flour. Pop. 20,000.

Rostov-on-Don, tn. and port, N. Caucasian Area, U.S.S.R., at head of delta of R. Don; exports wheat, linen, and wool; manufactures include flour, ropes, tobacco, boots and shoes; important fisheries. Pop. 233,000.

Rosyth (*rō-sith*), suburb of Dunfermline, Fife, Scotland; naval base of great importance during Great War; dockyard was closed in 1925.

Roth'erham, co. bor. and mkt. tn., W. Riding, Yorks, England, on R. Don; iron, steel, brass, railway wagon and glass works; sawmills, breweries, coal. Pop. 69,700.

Roth'erhithe, dist., S.E. London, England, on R. Thames; contains Surrey commercial docks; Thames Tunnel between Rotherhithe and Ractliff (opened 1908) is 4,865 ft. long, of which 1,400 ft. are under the river.

Rothessay (*roth'sā*), royal burgh and wat.-pl., Isle of Bute, Scotland; headquarters of Royal Northern Yacht Club; gives title of duke to heir-apparent to the throne. Pop. 9,300.

Roth'well. (1) Urb. dist., W. Riding, Yorks, England, 4 m. S.E. of Leeds; extensive collieries; manufactures ropes, matches. Pop. 15,600. (2) Or ROWELL, urb. dist., Northants, England, 4 m. N.W. of Kettering; makes boots and shoes, and clothing. Pop. 4,500.

Rotorua (*rō-tō-roo'a*), tn., North Island, New Zealand, on S.W. shore of lake of same name; hot springs; great summer resort. Pop. 4,000.

Rot'terdam, chief seaport and commercial tn. of Holland, on R. Maas, 20 m. from North Sea; about 70 per cent. of trade of Netherlands and about 80 per cent. of R. Rhine traffic passes through the town; transit trade in grain, timber, metals, hardware, petroleum, drugs and chemicals, rice, coffee, tobacco, and palm kernels; industries include shipbuilding, making of furniture, clocks, chocolate,

chemical products, distilling and brewing; great emigration port. Pop. 563,000.

Roubaix (*roo-bā'*), tn., Nord, France, 6 m. N.E. of Lille; woollen, cotton, and silk goods; connected with the Schelde by canal. Pop. 114,000.

Rouen (*ruan*), tn., cap. of Seine-Inférieure, France, on R. Seine, which is navigable up to that point; important railway centre and chief cotton port of France; industries include spinning and weaving of cottons, velvets, woollens, linens, mixed silk, machinery, shipbuilding, refining of petroleum, chemicals. Streets of old town are narrow and picturesque; contains some of finest churches in France. Was anc. cap. of Normandy. Pop. 116,000.

Roulers (*roo-lār*), tn., W. Flanders, Belgium, 13 m. N.W. of Courtrai; linen and cotton goods, lace, and silk ribbons. Pop. 27,000.

Roumania. See ROMANIA.

Rou'yn, mining camp, N.W. Quebec, Canada, c. 35 m. S. of E. end of L. Abitibi; on branch of Canadian National Rly.; copper, zinc, gold; copper smelted at Noranda mine by hydro-electric power.

Rovereto (*ro-ver-d'itō*), or ROVEREDO, tn., N. Italy, on R. Adige, 13 m. S.W. of Trent; paper, leather, silks, cottons. Pop. 14,000.

Rovigno (*ro-vēn'yō*), seaport, Istria, Italy, on E. of Gulf of Venice; wine, olives, and hazel nuts; tobacco; tunny and sardine fisheries. Pop. 11,000.

Rovigo (*ro-vē'gō*), tn., Italy, 28 m. S. of Padua; has remains of 10th cent. walls; beer, leather, wool, silk, linen, candles. Pop. 16,000.

Rov'no. See ROWNE.

Row. See RHU.

Rowley Re'gia, urb. dist., Staffs, England, 5 m. W. of Birmingham; nails and chains; collieries, potteries. Pop. 41,300.

Rowne (*ruw'ne*), formerly ROVNO, tn., Poland, 150 m. S.E. of Brest-Litovsk; rly. jn.; agricultural centre; horses and cattle. Pop. 30,000.

Roxburghshire, border co., Scotland, including Teviotdale and parts of Tweeddale and Liddesdale; hilly in S.; highest points: Auchopecairn (2,382 ft.), Ruberslaw, Blacklaw, and the three Eildons, near Melrose; drained by R. Tweed, with tributaries Gala and Teviot and their tribs., and by R. Liddel; industries: farming, sheep rearing, woollen and tweed manufacture; monastic remains at Jedburgh, Kelso, and Melrose; noted border keeps, including Branksome, Harden, and Hermitage; 'Watling Street' runs through county. Chief tns.: Jedburgh (co. town), Hawick, Kelso, and Melrose. Area, 666 sq. m.; pop. 45,800.

Roy'ston, urb. dist. and mkt. tn., Herts, England, 12½ m. N.E. of Hitchin, on Roman Icknield Way; church belonged to 12th cent. Augustinian priory. Pop. 3,800. (2) Urb. dist., W. Riding, Yorks, England, 4 m. N. of Barnsley; collieries. Pop. 7,200.

Roy'ton, tn., Lancashire, England, 2 m. N. of Oldham; cotton factories. Pop. 16,700.

R.S.F.S.R. See under RUSSIA.

Ruabon (*roo-d'bon*), tn., Denbighshire, Wales, on R. Dee; coal mines, iron, chemicals, bricks. Pop. 3,300.

Rüdesheim (*roo-des-him*), tn., Hesse-Nassau, Prussia, on R. Rhine opposite Bingen; wines. Pop. 4,000.

Ru'dolf, or BASSO-NAROK, lake, Africa, in Anglo-Egyptian Sudan, Abyssinia, Uganda, and Kenya, 185 m. long (N. to S.) and over 35 m. wide; in African Rift Valley. Alt. 1,200 ft.

Ru'dolstadt, tn., Thuringia, Germany, 18 m. S. of Weimar, on R. Sale; machinery, leather, porcelain, chemicals; tourist resort. Pop. 16,000.

Rueil (*roo-āl'*), tn., Seine-et-Oise, France, 6 m. W. of Paris, at foot of Mont Valérien; photographic materials; château of Malmaison near by. Pop. 15,000.

Rufiji (*roo-jē'jē*), riv., Tanganyika, E. Africa, rises in Livingstone Mts., breaks through Tundusi Mts., forming

Pangani rapids, below which it is navigable for small craft; enters Indian Ocean, forming delta 50 m. wide.

Rugby, tn., Warwickshire, England, on the R. Avon; famous public school; rly. centre; cattle markets, electrical and engineering works; hunting centre; important wireless transmitting station. Pop. 23,800.

Rugeley (*roo'li*), urb. dist., Staffs, England, on R. Trent, 8 m. S.E. of Stafford; coal mines, iron foundries, tanneries, corn mills. Pop. 5,300.

Rügen, isl. and summer resort, Pomerania, Prussia, in Baltic Sea; separated from mainland by Strela Sund; well-wooded, fertile; chief industry, herring fishing. Cap. Bergen. Area, 373 sq. m.; pop. c. 40,000.

Ruhr (*roor*), riv., w. Prussia, flows N. and W. to R. Rhine, 14 m. N. of Düsseldorf; length, 145 m. Flows through one of richest coal, iron, and steel districts in the world. Occupied by French (1923-25) as guarantee for payment of reparations by Germany after Great War. Chief tns. in dist.: Düsseldorf, Elberfeld, Barmen, Essen, Dortmund, Bochum, Mülheim.

Ruislip Northwood (*ri'slip*), urb. dist., Middlesex, England, 4 m. W. of Harrow; part of Greater London. Pop. 16,000.

Rum, or **Rhum**, isl., Inner Hebrides, Inverness-shire, Scotland; separated from Skye by Cuillin Sound; deer forest; mountainous; highest point, 2,667 ft. Area, 42 sq. m.; pop. 150.

Rumania. See **ROMANIA**.

Run'corn, canal port on the Manchester Ship Canal and R. Mersey, Cheshire, England; Bridgewater Canal here descends to Mersey by locks; iron foundries, tanneries, roperies, and chemical works. Pop. 18,200.

Run'ymede, meadow, with race-course, W. Surrey, England, on r. bk. of Thames, 2 m. W. of Staines; here King John is reputed to have sealed Magna Charta.

Ruschuk (*roos-chook*), tn., Bulgaria, on R. Danube; manufactures sugar,

tobacco, soap, beer, bricks, and pottery. Pop. 46,000.

Rush'den, urb. dist., Northants, England, 1½ m. S. of Higham Ferrers; shoemaking industry. Pop. 14,200.

Russia (*rush'ya*), popular name for certain European terr. of U.S.S.R.; bounded N. by Arctic Ocean, E. by Ural Mts., S. by Caspian Sea, Transcaucasia, Black Sea, and Ukraine, W. by White Russia, Latvia, Estonia, and Finland. This area represents the European territory of the Russian Socialist Federal Soviet Republic (R.S.F.S.R.). Surface is an undulating plain; highest point (17,100 ft.) in Valdai Hills, the source of many rivers; plain rises to Ural Mts. in E., Caucasus Mts. in S.; drained to Caspian Sea by Ural and Volga river systems; to Black Sea by Rs. Don and Dnieper; to Baltic by S. Dvina, Neva, etc.; to Arctic by Rs. Onega, N. Dvina, and Pechora. Climate continental, with hot summers and severe winters. In N. rivers are frozen for over 6 months, in centre for 3½ to 4½, and in S. for 2½ to 4. Rainfall varies from 25 in. along Baltic to 6 in. at W. end of Caspian; rain falls chiefly in summer.

Tundras border the Arctic Ocean; S. of this belt and extending round the Baltic Sea are great forests; flax is grown round the Baltic. S. of the forest comes the region of 'black earth,' one of the richest soils in the world, which stretches from the R. Dniester to the Ural Mts. The Black Sea is surrounded by pasture, arable land, and vineyards; the dist. round the Caspian, known as the Steppes, is chiefly pastoral, with horse breeding and sheep and cattle rearing. Probably c. 70 per cent. of the population is engaged in agriculture. The chief agricultural products are cereals—wheat, rye, barley, oats—sugar-beet, flax, tobacco, potatoes, and maize. Russia is exceedingly rich in minerals; gold, platinum, silver, lead, zinc, copper, iron, coal, naphtha, and salt are increasingly mined. Wood is

exported largely, chiefly fir, pine, oak, larch, elm, and silver birch. There are sawmills, manufactures of furniture, textiles, iron and steel, paper, leather, etc. The rivers are frozen in winter and low in summer, but excellent highways in spring and autumn. The Volga is connected with the Neva, and also with the N. Dvina, by a system of canals; the Dnieper is connected with the S. Dvina, and with the Niemen and the Vistula. Cap. of R.S.F.S.R. is Moscow. Area of European part of R.S.F.S.R., 1,541,530 sq. m.; pop. c. 89,000,000. See also UNION OF SOCIALIST SOVIET REPUBLICS.

Ruthénia, or CARPATHIAN RUTHE-
NIA, prov., E. Czechoslovakia, on s. slopes of Carpathian Mts.; bounded n. by Poland, s. by Hungary and Romania; chief riv., Tisza; maize, oats, wheat; tobacco; vineyards; Ruthenians mainly illiterate peasants. Chief tns., Mukacevo, Uzhorod. Area, 4,886 sq. m.; pop. 683,500.

Rutherglen (locally *rug'len*), royal and munic. burgh, Lanarkshire, Scotland, adjoining Glasgow; collieries, ironworks, chemical works, paper mills. Pop. 25,200.

Ruthin (*roo'thin*), mkt. tn., Denbighshire, Wales, on R. Clwyd; mineral water works; small trade in agricultural produce and building materials. Pop. 2,900.

Rut'land. (1) Smallest co. of England; borders on Leicestershire, Lincolnshire, and Northamptonshire; drained by R. Welland; surface diversified by hills; considerable tracts of woodland; main industry agriculture; live-stock raised and cheese manufactured; stone quarries and iron mines. Co. town, Oakham. Area, 152 sq. m.; pop. 17,400. (2) City, Vermont, U.S.A., 85 m. N.E. of Albany; marble quarries; ironworks. Pop. 15,000.

Ruvo di Puglia (*roo'vo de pool'ya*), tn., s. Italy, 20 m. w. of Bari; 12th cent. cathedral; potteries. Pop. 24,000.

Ruvenzo'ri, or RUNSORO, non-volcanic mountain mass, Central

Africa between Is. Edward and Albert. Discovered by Stanley (1888). Over twenty peaks are between 15,000 and 17,000 ft. in height, and snow-clad.

Ry'an, Loch, sea loch, Wigtownshire, Scotland; forms a safe anchorage, 8 m. long, 1½ to 2 m. wide. At head of loch is Stranraer.

Ryazan (*ri-á-zan'*), tn. and archiepisc. see, Russia, 150 m. S.E. of Moscow; distilleries; candles, malt, cotton stuffs, leather goods, and machinery. Pop. 49,000.

Rybnak (*rib'insk*), tn. and episc. see, Yaroslav prov., central Russia; at head of steamer navigation on R. Volga; great agricultural trade; breweries, distilleries, rope works, flour mills, and shipyards. Pop. 54,000.

Ry'dal, par. and vil., in Lake District, Westmorland, England; contains Rydal Water, with Rydal Mount, the home of Wordsworth. Pop. (par.) 500.

Ryde (*rid*), tn., Isle of Wight, England; wat.-pl.; overlooking Spithead; yachting centre. Pop. 10,500.

Rye (*ri*), tn., E. Sussex, England; one of the Cinque Ports; has a fine Norman and Early Eng. church; fishing and shipbuilding. Pop. 3,900.

Ry'hope, par. and vil., Durham, England, 3 m. S. of Sunderland; sea-bathing resort; coal mines in vicinity. Pop. (par.) 11,700.

Ry'ton, urb. dist., Durham, England, 6 m. W. of Newcastle; iron and steel; limestone quarries. Pop. 14,200.

Ryukyu Archipelago, formerly LIUKIU or LOOCHOO ISLANDS, group of Jap. islands stretching from Japan to Formosa; partly volcanic, partly coralline; mainly mountainous; sugar-cane is staple article of trade. Area, 935 sq. m.; pop. c. 455,000.

Rzeszów (*zhesh'uf*), tn., Poland, 90 m. W. of Lwow; horse fairs; agricultural centre. Pop. 25,000.

Rahov, or Rzhov, tn., Russia, on R. Volga, 130 m. W. of Moscow; shipbuilding, breweries, and tanneries; silk and leather. Pop. 32,000.

S

Saale (*zā'la*), riv., Germany; trib. of R. Elbe; rises in Fichtelgebirge; navigable for 100 m. Chief tns. on banks, Jena and Halle. Length, 226 m.

Saalfeld (*zāl'feld*), tn., Thuringia, Germany, on R. Saale, 22 m. s. of Weimar; machinery, lithographs, cigars, beer; ochre and iron mines. Pop. 18,000.

Saar, or **SARRE** (*zār*), trib. of R. Moselle, France and Germany, rises in Vosges Mts., flows roughly n., joining R. Moselle above Trier; connected by Saar Canal with Marne-Rhone Canal. The valley has extensive coal and iron fields, and many manufactures; noted for its wines. See also SAAR TERRITORY.

Saarbrücken (*zār'brook-en*), chief tn., Saar Terr., on R. Saar; centre of important coal-mining dist.; iron-works; manufactures include glass, chemicals, tobacco, textiles, and leather. Pop. 125,000.

Saarlburg. See SARREBOURG.

Saa're Maa, formerly OESSEL, isl., Estonia, in Gulf of Riga, Baltic Sea; agricultural and forest industries; exports ponies, grain, potatoes, fish, spirits. Chief tn., Arensburg. Area, 1,010 sq. m.; pop. 60,000.

Saargemünd. See SARREGUEMINES.

Saarlouis (*zār'loo-ē*), tn., Saar Terr.; manufactures leather, porcelain, glass; coal mines in vicinity. Pop. 16,000.

Saar Territory, tract of country on Franco-German frontier, n. of Lorraine, in valley of R. Saar. By the Treaty of Versailles France secured the output of its coal mines as compensation for the destruction of her n.e. coalfields. Administered till 1935 by Commission responsible to League of Nations. Chief tn., Saarbrücken. Area, 726 sq. m.; pop. 790,000.

Saaz. See ZATEC.

Sabac (*shā'bats*), or SHABATZ, tn., Serbia, Yugoslavia, on R. Sava, 40 m. w. of Belgrade; exports grain, livestock, and prunes. Pop. 9,000.

Sabadell, Spain, on R. Ripoll, 10 m. n. of Barcelona; manufactures textiles, paper, flour; iron foundries and distilleries. Pop. 38,000.

Sabak'l, river, Kenya Colony, E. Africa; rises n. of Nairobi and enters Indian Ocean. Length, 400 m.

Sables d'Olonne (*sāb-l dōl-on'*), Les, fishing port, Vendée, France, on Bay of Biscay; favourite wat.-pl.; sardine fishing and canning. Pop. 14,000.

Sacramento, cap., California, U.S.A., on Sacramento R.; two cathedrals; has Southern Pacific Rly. workshops; manufactures furniture, pottery, boxes; flour milling, ore smelting, meat packing, fruit canning. Pop. 94,000.

Sacriston, eccles. par. and vil., Durham, England, 3½ m. n.w. of Durham; large coal mines. Pop. (par.) 8,400.

Sad'leback, mt., Cumberland, England; near Skiddaw; alt. 2,847 ft.

Sad'leworth, urb. dist., Yorks, England, on R. Tame, 12 m. s.w. of Huddersfield; manufactures woollen and cotton goods. Pop. 12,600.

Sad'o, isl., Sea of Japan, off w. coast of Honshu; hilly; gold and silver. Area, 336 sq. m.; pop. 115,000.

Sadowa. See HRADEC KRÁLOVÉ.

Safed' Koh, mt. range, on n.w. frontier of India, running parallel to and s. of R. Kabul. Sikaram (15,620 ft.) is highest point.

Saffron Walden, munic. bor., Essex, England, near R. Cam; anc. castle and church; grammar school (1623), training coll.; iron foundries, malting, brewing. Pop. 5,900.

Safi, port, Morocco, on Atlantic coast; exports grain, wool, hair. Pop. 27,000.

Sagaing (*sa-ga-èng'*). (1) Dist., Burma, drained by R. Irrawaddy; wheat, rice, peas, and cotton are grown. Area, 1,825 sq. m.; pop. 327,000. (2) Cap. of above, 10 m. s.w. of Mandalay; anc. cap. of Burma. Pop. 12,000.

Sagan (*zā'gan*), tn., Silesia, Prussia, on Bober R., trib. of R. Oder, 45 m. n.w. of Leibnitz; manufactures cloth, woollen and cotton goods, porcelain, glass and bricks. Pop. 18,000.

Saginaw, city, Michigan, U.S.A., on R. Saginaw, 90 m. n.w. of Detroit; railway workshops, machinery, saw-mills, beet sugar, furniture. Pop. 81,000.

Saguenay (*sag'èn-ā*), riv., Quebec, Canada, enters R. St. Lawrence at Tadoussac; majestic scenery; harnessed for power; length, 120 m.

Sahara (*sa-hā'ra*, or *sā'ha-ra*), great belt of desert, N. Africa, stretching e. from Atlantic Ocean to R. Nile, and s. from Atlas Mts. toward R. Niger and L. Chad. Practically whole region is in Fr. sphere of influence. In the centre are important plateaus, with Mts. Ahaggar, Tibesti, Tummo, and Air (Asben), covered with snow three months of the year, and reaching a height of 6,500-8,000 ft. In the valleys water is found below the surface. The Sahara is crossed by many caravan routes, which connect the oases; routes from Murzuk in Italian Libya to L. Chad, and from Morocco to Cairo via Tafilalet, are of particular importance. Motor-cars are being used on these routes. Vegetation scarce except in oases, where fig trees and date palms are principal trees. The camel is the chief animal used by the nomads; horses, cattle, and sheep are raised in many of the valleys. The inhabitants are chiefly Berbers, Tuaregs, Arabs, and Tibbus; all profess Mohammedanism. Trade in gold dust, dates, salt, soda, saltpetre, and ostrich feathers. Area (est.), 3,000,000 sq. m.; pop. (est.) 2,000,000.

Saharanpur, tn., United Provinces, India, 70 m. n. of Meerut;

has botanical gardens; railway workshops and wood-carving establishments. Pop. 62,000.

Saida. See **Sidon**.

Saigon (*sī-gow'*), cap., Cochinchina, French Indo-China, on R. Saigon; important seaport; rice, spices. Pop. 143,000.

Saima (*sī'mā*), LAKE, largest lake of Finland. Area, 502 sq. m.

St. Agnes, port, Cornwall, England, 8½ m. n.w. of Truro; mkt. tn. Pop. 4,000.

St. Albans, city, Herts, England; famous cathedral; manufacture of straw hats, brushes, silk; printing, brewing. Pop. 28,600.

St. Amand-les-Eaux (*san-tam-an'-lāz-ō'*), tn., Nord, France, at junction of Rs. Elnon and Scarpe, 8 m. n.w. of Valenciennes; ironfounding, porcelain, hosiery; sulphur and mud baths. Pop. 11,000.

St. Andrews, royal burgh and wat.-pl., Fife, Scotland, on North Sea; the 'Mecca' of golf. Industries include fishing and manufacture of golf balls and clubs. Univ. is oldest in Scotland (founded 1411). Ruined cathedral, and remains of church of St. Regulus. Pop. 8,300.

St. Anne's on the Sea, wt.-pl., Lancs, England. Now part of Lytham St. Anne's.

St. Asaph, city, Flintshire, Wales, in Vale of Clwyd; cathedral (13th cent.). Pop. 1,800.

St. Austell, mkt. tn., Cornwall, England, near St. Austell Bay; china-clay works, pilchard fisheries; tin and copper mines in vicinity. Pop. 8,300.

St. Bernard Pass. See **GREAT ST. BERNARD PASS** and **LITTLE ST. BERNARD PASS**.

St. Bla'zey, par. and small tn., Cornwall, England, 4 m. n.e. of St. Austell; active trade connected with surrounding tin-mining dist. Pop. (par.) 3,000.

St. Boniface, city, Manitoba, Canada, on Red R., opposite Winnipeg, of which it is a suburb; French-speaking; one of oldest settlements in prov. Pop. 15,500.

St. Boswells, or **LESSUDEN**, vil.

and summer resort, Roxburghshire, Scotland, 3 m. S.E. of Melrose; Dryburgh Abbey. Pop. 580.

St. Brienc (*san brê-oo'*), tn., Côtes-du-Nord, France, 35 m. W. of St. Malo; industries include wool, timber, iron, steel, agricultural implements. Pop. 24,000.

St. Cath'arines, city, Ontario, Canada, on Welland Canal; in fruit region; mineral springs; iron manufactures. Pop. 20,000.

St. Chamond (*san shâ-mon'*), tn., Loire, France, on R. Gier, 6 m. N.E. of St. Etienne; coal mines; silk ribbon manufacture. Pop. 15,000.

St. Christopher. See **St. Kitts**.

St. Clair, LAKE, part of system of Great Lakes, Canada, receiving St. Clair R. from L. Huron and discharging by Detroit R. into L. Erie; on international boundary; several islands; alt. 576 ft. Area, 460 sq. m.

St. Claude (*san klôd'*), tn., Jura, E. France, on R. Bienne; cathedral; briar pipes, chessmen, and other hardwood articles. Pop. 12,000.

St. Cloud. (1) (*san kloo'*) Tn., Seine-et-Oise, France, on R. Seine, 10 m. W. of Paris; in park is famous Sèvres porcelain factory. Pop. 13,000. (2) Tn., Minnesota, U.S.A., on R. Mississippi, 60 m. N.W. of Minneapolis; butter and grain produced in vicinity. Pop. 16,000.

St. Columb Major (*cul'tum*), mkt. tn., Cornwall, England, 14½ m. N.E. of Truro; anc. stone circle of the Nine Maidens. Pop. 2,500.

St. Columb Minor, par. and vil., Cornwall, England, 5 m. W. of above; annual stock fair. Pop. (par.) 1,400.

St. Cyr (*san sêr*), tn., France, 2½ m. W. of Versailles; famous military school. Pop. 4,000.

St. Denis (*san de-nî'*). (1) Tn., Seine, France, on R. Seine, 4 m. N. of Paris; its abbey church (7th century) was burial-place of kings of France; chemicals, machinery, spirits, soap, etc. Pop. 80,000. (2) Cap. of French isl. of Réunion, Indian Ocean; cathedral. Pop. 24,000.

St. Dié (*san dê-d'*), tn., Vosges, France, 25 m. E. of Epinal; cathedral; iron and copper founding, machinery, woodwork, hosiery, bleaching. Pop. 15,000.

St. Dizier (*san de-zê-â'*), tn., Haute-Marne, France, on R. Marne; iron-works, boat building. Pop. 15,000.

St. Domingo. * See **HAITI**; **SANTO DOMINGO**.

Sainte-Croix (*krwa*), or **SANTA CRUZ**, isl., W. Indies, belonging to U.S.A.; one of Virgin Islands; sugar, rum. Cap. Christiansted. Area, 84 sq. m.; pop. 20,000.

St. Eli's, MOUNT, volcanic mt., N. America, part of range between Alaska and Canada; perpetually snow-covered; at foot is Malaspina Glacier; alt. 18,017 ft.

Saintes (*santf*), tn., Charente-Inférieure, France, on R. Charente; agricultural machinery and earthenware; cathedral. Pop. 16,000.

St. Etienne (*san-tâ-tê-en'*), cap., Loire, France, on R. Furens; on coal and iron field; firearms, machinery, ribbons, velvets, dyeing, distilling; school of mining. Pop. 194,000.

St. Fil'ans, vil., Perthshire, Scotland, at E. end of Loch Earn; a summer resort. Pop. 300.

St. Gallen (*French St. Gall*). (1) Canton, Switzerland, bordering R. Rhine and L. Constance; mountainous, with several glaciers; some small low-lying plains; chief industries, cattle rearing, cotton spinning, embroidery and lacemanufacture. Area, 785 sq. m.; pop. 301,000. (2) Cap. of above, in valley of R. Steinach, 6 m. from L. Constance; manufactures embroidery and cotton goods; cathedral; large library. Pop. 65,000.

Saint-Germain-en-Laye (*san-sher-man-on-lâ'*), tn., Seine-et-Oise, France, 13 m. W. of Paris, on R. Seine; summer resort; fine forest; historic castle; manufactures cottons and woollens. Pop. 19,000.

St. Ger'mans, small tn., Cornwall, England, 7 m. W. of Plymouth, on an arm of Plymouth Sound; exports coal; fisheries. Pop. 2,000.

St. Gotthard Pass (*san go-tär*), pass, Alps, Switzerland, between upper valleys of Rs. Reuss and Ticino; alt. 6,936 ft.; motor and railway route across Alps to Italy; rly. tunnel over 9 m. long.

St. Hel'na, British isl., S. Atlantic, 1,200 m. off w. coast of Africa; of volcanic origin; mountainous and rocky; highest point, 2,700 ft.; healthy climate; coaling and cable station; cattle, fruit, vegetables, flax, lace; scene of Napoleon's exile at Longwood (1815-21). Cap. and port, Jamestown. Area, 47 sq. m.; pop. 3,700.

St. Hel'ens. (1) Co. bor., Lancs, England, 12 m. N.E. of Liverpool; important glass manufacture; foundries, chemical works, copper-smelting works, pottery. Pop. 106,800. (2) Urb. dist., Isle of Wight, England, 4 m. S.E. of Ryde; wat.-pl. Pop. 5,500.

St. Helier (*hē'yer*), cap., Jersey, Channel Islands, on St. Aubin's Bay; seapt., wat.-pl. Pop. 26,000.

St. Hyacinthe (*san ē-ā-san*), tn., Quebec, Canada, on R. Yamaska, 32 m. N.E. of Montreal; agricultural machinery, woollens, leather, organs. Pop. 11,000.

St. Ing'bert, tn., Saar Terr., 6 m. N.E. of Saarbrücken; coal mines, iron and steel works; manufactures glass, machinery, leather, soap. Pop. 17,000.

St. Ives (*īvz*). (1) Munic. bor. and winter resort, Cornwall, England, on St. Ives Bay; boat building; pilchard, herring, and mackerel fisheries. Pop. 6,700. (2) Munic. bor., Hunts, England, on R. Ouse; cattle market; agricultural produce. Pop. 2,700.

Saint John, largest city and port, New Brunswick, Canada, on Bay of Fundy, at mouth of R. St. John; manufactures cottons, woollens, tools, machinery, paper; lumber trade; grain elevators for winter shipment of wheat; sugar refinery; valuable fisheries; harbour ice-free all year. Pop. 47,000.

St. John, riv., New Brunswick, Canada, rising in two branches, one in Maine, U.S.A., and one in Quebec;

notable reversing falls at mouth; enters Bay of Fundy; navigable for 86 m. Length, 450 m.

St. John's. (1) Cap. Newfoundland; fine harbour, two cathedrals; shipping and fisheries; exports fish, esp. cod; manufactures seal oil; foundries, tanneries. Pop. 41,000. (2) Tn., Quebec, Canada, on R. Richelieu, 21 m. S.E. of Montreal; manufactures flour, pottery, silk, sewing machines. Pop. 7,700. (3) Cap. of Antigua, Brit. W. Indies. Pop. 8,000.

St. Joseph. (1) City, Missouri, U.S.A., on Missouri R., 50 m. N.N.W. of Kansas City; important railway centre; in rich agricultural region; manufactures blankets, clothing, patent foods, agricultural implements; meat packing. Pop. 81,000. (2) Tn., S.W. Michigan, U.S.A., on L. Michigan; health resort, with mineral springs; fruit farms. Pop. 10,000.

St. Julien, vil., France, on R. Gironde, 35 m. N. of Bordeaux; noted for its claret.

St. Julien (*san zhoo-nē-ān*), tn., Haute-Vienne, France, 18 m. N.W. of Limoges; gloves and leather goods. Pop. 11,000.

St. Just, mkt. tn. and urb. dist., Cornwall, England, 7 m. W. of Penzance; tin and copper mine region. Pop. 4,400.

St. Kilda. (1) Rocky isl., largest of small group, Outer Hebrides, Scotland, 40 m. W. of North Uist; population transferred to mainland of Scotland (1930). (2) Wat.-pl., Victoria, Australia, 3 m. S.E. of Melbourne; longest pier in Australia. Pop. 25,000.

St. Kitts, or **St. CHRISTOPHER**, isl., Leeward Group, Brit. W. Indies; mountainous; soil fertile and highly cultivated; sugar, rum, cotton. Cap. Basseterre. Area, 65 sq. m.; pop. 27,000.

St. Lambert (*san lan-ber*), tn., Quebec, Canada, on R. St. Lawrence, opposite Montreal. Pop. 6,000.

St. Lawrence, great riv. of Canada, carries off surplus waters of Great Lakes; length from Lake Ontario to

opening into Gulf of St. Lawrence c. 750 m.; expands during course into several lakes, as those of the Thousand Isles, St. Francis, and St. Peter, and in other places contracts and forms rapids, as Long Sault and Lachine; canals have been constructed to avoid the rapids; gives access to navigation of some 2,200 m. to head of the Great Lakes. Chief tribes, from N. are Ottawa, St. Maurice, Saguenay, Portneuf, Betsiamites, Bustard, and Manicouagan; and from S., Richelieu and Chaudière. Except in winter, when river is ice-bound, seagoing vessels can ascend to Montreal.

St. Leonards. See HASTINGS.

St. Lo (*san lō*), cap., La Manche, France, 16 m. S.E. of Cherbourg; manufactures paper, druggery; tanning and bleaching industries. Pop. 10,000.

St. Louis. (1) (*loo'is*, or *loo'ē*) City, Missouri, U.S.A., on R. Mississippi a few miles below its junction with R. Missouri; has frontage of 19 m. along river, which is here crossed by two magnificent bridges, connecting the city with East St. Louis. Seat of Washington Univ. and St. Louis R.C. Univ. Great trading centre both by railway and river, and leading raw fur market of the world; important shoe manufactures; grain and cotton market; has meat-packing establishments, printing works; manufactures include machinery, hardware, motor-cars, chemicals, flour. Pop. 822,000. (2) (*san loo-e*) Cap., Senegal, French W. Africa; cathedral, governor's palace; educational centre. Pop. 20,000.

St. Lucia (*loo-sē'a*), largest and most northerly of Windward Islands, British W. Indies; surface hilly and forested; famed for beautiful scenery; produces sugar, cocoa, lime-juice, coconuts; chief coaling station and base for fleet in W. Indies. Cap. Castries. Area, 233 sq. m.; pop. 57,000.

St. Malo (*san mā-lō*), fortified port, Ille-et-Vilaine, France, on English Channel; built on rocky islet com-

municating with mainland by causeway; favourite bathing resort; cathedral; shipbuilding and iron-founding; exports cereals, early potatoes and vegetables, fruit, eggs, wine, meat. Pop. 12,000.

St. Martin, isl., Leeward Islands, W. Indies, N. part French, S. part Dutch; salt manufacture. Area, 38 sq. m.

St. Mary's Loch, fresh-water loch, Selkirkshire, Scotland, joined to smaller Loch of the Lowes; 814 ft. above sea-level; river Yarrow issues from it.

Saint Michaels, or **São Miguel**, volcanic isl., largest of the Azores; hot springs; hemp, wine, fruit. Cap. Ponta Delgada. Area, 299 sq. m.; pop. 125,000.

St. Michael's Mount, rocky islet, Cornwall, England, in Mount's Bay; mansion and chapel on summit; at low tide joined to mainland by natural causeway.

St. Michel, MONT. See MONT ST. MICHEL.

St. Mihiel (*san mē-yel'*), tn., Meuse, France, 20 m. S. by E. of Verdun, on R. Meuse; noted Benedictine abbey; embroidery and lace manufactures. Pop. 4,300.

St. Moritz, tourist resort, Upper Engadine, Grisons canton, Switzerland; winter sports; mineral springs. Pop. 2,600.

St. Nazaire (*san nā-zāir'*), port, Loire-Inférieure, France, on R. Loire estuary; considerable trade, chiefly with England; iron shipbuilding, blast furnaces, and steel works. Pop. 35,000.

St. Neots (*nēts*, or *nē'ots*), mkt. tn., Hunts, England, on R. Ouse; paper and flour mills, and engineering works. Pop. 4,300.

St. Nicolas (*san nē-ho-lā'*), tn., E. Flanders, Belgium; cottons, linen, woollens, and lace. Pop. 37,000.

St. Ninians, or **St. Rinkans**, par., Stirlingshire, Scotland, suburb of Stirling; woollens, nails, screw-bolts, tanneries; close to battlefield of Bannockburn. Pop. 14,800.

St. Omer (*san-tô-mâr*), tn., Pas-de-Calais, France, 26 m. by rail s.e. of Calais; breweries, distilleries, soap-works, and linen manufactures; cathedral; ruins of Benedictine abbey. Pop. 17,000.

St. Pancras, metropolitan bor., N. London, England; contains part of Regent's Park. King's Cross, Euston, and St. Pancras rly. stations are in bor. Pop. 198,100.

St. Paul, tn., Minnesota, U.S.A., on R. Mississippi, close to Minneapolis, its 'twin city'; railway centre; furs, lumber products, meat packing, flour milling, boots and shoes, clothing; motor-car workshops; univ.; cathedral. Pop. 271,000.

St. Paul de Loanda. See LOANDA.

St. Peter Port, tn., cap., Guernsey, Channel Islands; fine harbour; exports fruit, vegetables, and flowers. Pop. 16,000.

St. Petersburg. (1) See LENINGRAD. (2) Tn., Florida, U.S.A., on w. coast, 20 m. s.w. of Tampa; holiday resort; winter vegetables, fruit, and fish exported. Pop. 40,000.

St. Pierre (*san pê-âr*). (1) Tn., Martinique, French W. Indies; utterly destroyed, with its 26,000 inhabitants, by eruption of Mont Pelée (May 8, 1902). (2) Tn., Réunion, Indian Ocean; sugar. Pop. 20,000. (3) Rocky isl. in Atlantic, s. of Newfoundland, forming with Miquelon Islands the French colony of St. Pierre and Miquelon; cod fishing. Total area, 93 sq. m.; pop. 4,000.

St. Pölten, tn., Lower Austria, Austria, on R. Traisen, 30 m. w. of Vienna; iron and hardware goods; cotton. Pop. 32,000.

St. Quentin (*san kôn-tân*), tn., Aisne, France, 80 m. n.n.e. of Paris; connected by canal with Rs. Schelde, Somme, Oise, and Seine; manufactures of cotton, wool, silk, sugar, machinery, chemicals. Pop. 49,000.

St. Servan (*san ser-von*), port and wat.-pl., Ille-et-Vilaine, France, adjoining St. Malo; boat building, rope making, manufacture of ship biscuits. Pop. 11,000.

St. Thomas. (1) Tn., Ontario, Canada, 15 m. s. of London; railway centre and workshops; flax, flour, and planing mills. Pop. 16,000.

(2) Or São Thomé, volcanic isl., Portuguese W. Africa, in Gulf of Guinea; highest summit, Pico de São Thomé (7,020 ft.); cocoa, coconuts, coffee, rubber, cinchona; fruit; more than half of isl. is forested. Cap. St. Thomas. Area (with San Principe I.), 320 sq. m.; pop. 52,000. (3) Volcanic isl., U.S.A. Virgin Islands, W. Indies; sugar, cotton. Cap. St. Thomas. Area, 27 sq. m.; pop. 9,000.

St. Trond (*san trôn*), tn., Limburg, Belgium, 18 m. n.w. of Liège; beer, spirits, sugar, tobacco. Pop. 16,000.

St. Vincent, volcanic isl., Windward Islands, Brit. W. Indies; well wooded; arrowroot, cotton, sugar, rum, peanuts. Cap. Kingstown. Area, 150 sq. m.; pop. 51,000.

Sakai, seapt., Honshu, Japan, on Osaka Bay; manufactures cotton goods, cutlery, bricks, and saké. Pop. 105,000.

Sakhalin (*sa-ka-lên*), long, narrow isl. in N. Pacific, n.e. Asia; the n. half belongs to Russia and the s., known as Karafuto, to Japan; traversed n. to s. by forest-clad mountain ranges; climate severe; large areas fit for agriculture and grazing; coal and naphtha are worked; salmon fishery. Total area, 24,560 sq. m.; total pop. 216,000.

Salamanea (*sa-la-mang'ka*). (1) Prov., Spain; mountainous in s.; watered by R. Douro; timber plentiful on mountain slopes, and grain on plains; much live-stock raised; gold, iron, coal, copper, and other minerals are found. Area, 4,829 sq. m.; pop. 332,000. (2) Cap. of above; ancient city with many beautiful old buildings and cathedral; univ.; great railway centre. Pop. 37,000.

Sal'as, tn., N. Spain, 21 m. w. of Oviedo; coal-mining dist. Pop. 18,000.

Salayar (*sa-lî'ar*), isl. group, Dutch

E. Indies; maize, coconuts, tortoise-shell, indigo. Pop. 63,000.

Salcombe, urb. dist., Devon, England, 26½ m. S.E. of Plymouth; wat.-pl. and port. Pop. 2,400.

Salé (*sāl*), urb. dist., Cheshire, England, on R. Mersey, suburb of Manchester; market gardening. Pop. 28,100.

Salé, or **SALLEE** (*sā-lā*), port, Morocco, W. Africa, on Atlantic coast; exports carpets and wool. Pop. 21,000.

Salem (*sāl'em*). (1) Dist., Madras, India; hilly, with broad plains; well-watered; rice, millet, pulses, oil-seeds, coffee. Area, 6,912 sq. m.; pop. 2,112,000. (2) Cap. of above, 75 m. N.W. of Trichinopoly; weaving and carpet manufacture; agricultural centre. Pop. 52,000. (3) Tn., Massachusetts, U.S.A., on Massachusetts Bay; has good harbour; manufactures cotton goods, lumber products, machinery, boots, shoes, and leather. Pop. 43,000. (4) Cap. of Oregon, U.S.A., on R. Willamette; flour mills, fruit packing, canneries, and lumbering. Pop. 26,000.

Salerno, port, S.W. Italy, on Gulf of Salerno; cathedral; manufactures cotton and silk goods. Pop. 63,000.

Sal'ford, co. bor., Lancs, England, on R. Irwell; adjoins Manchester; engineering; electrical instruments, furniture, rubber articles; chief industries are cotton and chemical manufactures. Pop. 223,400.

Salina (*sa-lē'na*), tn., central Kansas, U.S.A., on R. Smoky Hill; univ.; flour milling is most important industry. Pop. 16,000.

Salisbury (*sawls-ber-e*). (1) Tn., Wilts, England, on R. Avon; famous Early Eng. cathedral; the spire (404 ft.) is the loftiest, and the cloisters are the most perfect in England. Several old churches and other interesting buildings. Pop. 26,500. (2) Cap. of S. Rhodesia, S. Africa; centre of goldfields; has an agricultural laboratory. Pop. 22,000 (8,000 whites).

Salisbury Plain, tract of rolling downs, Wilts, England, about 20 m. by 16 m. Many barrows and other ancient remains, including Stonehenge. Important military camp.

Sallee. See **SALÉ**.

Salon (*sā-lon'*), tn., Bouches-du-Rhône, France, 40 m. N.W. of Marseilles; olive oil, silk, soap, trade in almonds and early produce. Pop. 9,000.

Salonika (*sā-lon-ē'ka*), tn., Macedonia, Greece, on gulf of same name; notable for its antiquities, including Roman triumphal arch and old church of St. Sophia; anc. citadel; cotton and woollen mills, soap works, breweries, flour mills; safe and roomy harbour. As Thessalonica, visited by St. Paul. Allied base during Great War. Pop. 237,000.

Salon'ta, formerly **NAGY SZALONTA**, tn., Romania, on border of Hungary; pig rearing; trade in timber and cereals. Pop. 14,000.

Salop. See **SHROPSHIRE**.

Salsette (*sal-set'*) ('sixty-six villages'), isl., N. of Bombay, India; connected with Bombay by two bridges and Sion causeway; rice fields. Chief tn., Thana. Area, 246 sq. m.; pop. 150,000.

Sal'ta. (1) Prov., N.W. Argentina, S. America; plains in E., slopes of Andes Mts. in W.; part of prov. well timbered; soil very fertile, but irrigation necessary; agriculture is chief occupation; some stock rearing; sugar, wine, maize, wheat, tobacco. Area, 48,302 sq. m.; pop. 166,000. (2) Cap. of above, on R. Arias; contains college and cathedral; has large trade with Bolivia. Pop. 28,000.

Salt'aire, model vil., W. Riding, Yorks, England, on R. Aire, 3 m. N.W. of Bradford; founded in 1853 by Sir Titus Salt; alpaca and mohair. Pop. 4,800.

Salt'ash, tn. and port, Cornwall, England, on R. Tamar, 5 m. N.W. of Plymouth; coasting trade. Pop. 3,600.

Salt'burn-by-the-Sea, wat.-pl., N. Riding, Yorks, England; fine sandy

beach, cliffs, and pleasure grounds. Pop. 3,900.

Salt'coats, port and wat.-pl., Ayrshire, Scotland; salt formerly manufactured; its shipbuilding has been transferred to Ardrossan. Pop. 10,200.

Saltillo (*sal-tē'yo*), cap. of Coahuila, Mexico, 37 m. s.w. of Monterey; cottons, woollens, flour; cereals are produced. Pop. 40,000.

Salt Lake, GREAT. See GREAT SALT LAKE.

Salt Lake City, cap. of Utah, U.S.A., on R. Jordan; settled by Mormons (1847); contains Mormon temple, tabernacle, and administration building and univ.; commercial centre; chief industries are meat packing, smelting, manufacture of cars, printing and publishing, lumber products, leather goods, copper, tin, and sheet-iron products, and wireless equipment. Pop. 140,000.

Salt'ney, par. and vil., Flintshire, Wales, on R. Dee; anchors, chain cables, and railway carriage works; large docks. Pop. (par.) 6,000.

Salt'o, port, Uruguay, S. America, on Uruguay R.; trade in leather and salted meats; wine. Pop. 30,000.

Salut, ILES DU (*sāl-oo, ēl doo*) ('isles of safety'), group of three islands (Isles Joseph, Royale, and du Diable), French Guiana, S. America, 31 m. n.w. of Cayenne; convict settlements. Pop. c. 15,000.

Saluzzo (*sa-loot'so*), tn., Cuneo, Italy, 40 m. s. of Turin; cathedral and old castle; silk, leather, hats are manufactured. Pop. 16,000.

Salvador, republic, Central America; smallest but most densely populated state; surface generally high tableland, with hills rising above it to 12,000 ft.; earthquakes frequent; produces large quantities of coffee; rubber, sugar, tobacco, hemp, cacao, and balsam are also produced; minerals include gold, silver, iron, and mercury. Chief tn., San Salvador. Area, 13,176 sq. m.; pop. 1,723,000.

Salween. (1) River, Burma; rises in Tibet; enters Upper Burma on E., traverses the Shan states, and flowing

s. enters the Gulf of Martaban; length estimated at 1,800 m. (2) Dist., Tenasserim, Lower Burma; extremely mountainous, with many rivers. Area, 2,666 sq. m.; pop. 50,000.

Salzbrunn (*salts'brook*), tn., Silesia, Prussia, 30 m. s.w. of Breslau; manufactures porcelain and glass; mineral springs; health resort. Pop. 15,000.

Salzburg (*salts'boorg*). (1) Prov., Austria, N. and E. of Tirol; mountainous; forests and pasture land; numerous lakes; watered by R. Salzach; rich in minerals, especially salt; chief industries are cattle raising, dairy farming, and the timber trade. Area, 2,762 sq. m.; pop. 223,000. (2) Cap. of above; beautifully situated on R. Salzach; fine castle; cathedral; manufactures musical instruments and marble ornaments; brewing. Pop. 38,000.

Salzkammergut (*salts-kam'er-goot*), lake district in Austrian Alps; contains over forty lakes, including Attersee or Kammersee, the largest lake in Austria (16 sq. m.); salt mines. Area, 240 sq. m.

Salzwedel (*salts'vā-del*), tn., Saxony, Prussia, 70 m. s.e. of Hamburg; cloth, linen, leather, needles, chemicals, sugar, and alcohol. Pop. 14,000.

Samar'a. (1) Province of s.e. Russia, in basin of R. Volga; slopes of Ural Mts. in n., steppe land in s.; soil mostly fertile, especially in R. Samara valley; produces cereals, vegetables, tobacco, honey; dairy farming is increasing in importance. Area, 41,358 sq. m.; pop. 2,410,000. (2) Cap. of above, at junction of Rs. Samara and Volga; river port and rly. jn.; trade in grain; flour mills and breweries; machinery, matches. Pop. 176,000.

Samarang, port, Java, Dutch E. Indies, on n. coast, c. 200 m. w. Surabaya by rail; important commercial centre; exports sugar, coffee, tobacco, indigo. Pop. 158,000.

Sama'ria, city and prov. of anc. Palestine. The city lay n.w. of Shechem, 35 m. n. of Jerusalem.

Samarqand, formerly SAMARKAND,

cap. of Uzbek, U.S.S.R.; connected by rly. with Caspian Sea; many beautiful architectural remains, including finest mosque in Central Asia; manufactures cloth, leather, flour, bricks; distilleries. Pop. 105,000.

Samarra', tn., Iraq, on R. Tigris, 65 m. N.W. of Baghdad; former residence of the caliphs; station on Baghdad Rly. Pop. c. 3,000.

Sams'wa, tn., Iraq, on R. Euphrates, and on Baghdad Rly.; trades in vegetables and cereals; manufactures carpets. Pop. 10,000.

Sambalpur. (1) Dist., Bihar and Orissa, India; mostly plain, with hilly portions; chief riv., Mahanadi; large area under forest. Area, 3,824 sq. m.; pop. 789,000. (2) Tn. in above, on R. Mahanadi; manufactures tussore silk and cotton cloth. Pop. 14,000.

Sambre (*san-br*), riv. of France and Belgium, rises in Aisne dep., France, flows E.N.E. and joins R. Meuse at Namur; navigable for barges; united by canals with Rs. Senne, Schelde, and Oise. Length, 118 m.

Samoa (*sam-sha*), or **NAVIGATORS' ISLANDS**, group of fourteen volcanic islands surrounded by coral reefs in S. Pacific; generally mountainous and fertile. The islands are subject to hurricanes. Chief products, coconuts, oranges, pineapples, bananas, and other fruits; exports copra, cocoa beans. The Territory of Western Samoa (islands of Savaii, Upolu, Apolima, and Manono), formerly German, now under mandate, governed by New Zealand; Tutuila and the other islands belong to U.S.A. R. L. Stevenson is buried on top of Vaea mountain near his home of Vailima in Upolu. Chief ports, Apia in Upolu, Pago-Pago in Tutuila. Western Samoa: area, c. 1,250 sq. m.; pop. 44,000. American Samoa: area, 75 sq. m.; pop. 8,000.

Sa'mos, isl., Greece, Aegean Sea; surface mountainous, with fertile valleys; many vineyards; cotton, tobacco, and silk are produced; exports wine, oil, tobacco, leather, hides. Area, 180 sq. m.; pop. 70,000.

Sam'othrace, isl., Greece, in Aegean

Sea; sponge fisheries; hot sulphur springs. Area, 30 sq. m.; pop. 3,500.

Samsun, port, Asiatic Turkey, on Black Sea; exports copper, timber, tobacco, wool, agricultural produce. Pop. 76,000.

San, riv., Galicia, Poland; rises in Beskid Mts., flows past Przemyśl, and joins R. Vistula below Sandomir; length, c. 280 m.

Sana, cap. of Yemen, s.w. Arabia; celebrated for its fruit; trades in coffee. Pop. 20,000.

San Antonio, tn., Texas, U.S.A., on R. San Antonio; rly. jn.; manufactures iron and steel goods, textiles, leather, soap, cigars; oilfields in vicinity; large trade in cattle, cotton, wool, and hides; winter health resort. Pop. 255,000.

San Bernardino (*ber-nar-dē'no*), city, California, U.S.A., 50 m. E. of Los Angeles; important fruit-growing centre—oranges, lemons, citrons; manufactures lumber and meat products. Pop. 37,000.

San Catal'do, tn., central Sicily, 4 m. W. of Caltanissetta; has a picturesque cathedral; sulphur is mined. Pop. 18,000.

San Cristo'bal, tn., Mexico, in isthmus of Tehuantepec; cathedral; textiles and earthenware. Pop. 13,000.

Sancti Spiritus (*sangh'tē spē'rē-toos*), city, Santa Clara, central Cuba, on R. Yayabo; centre of extensive agricultural and grazing dist. Pop. 26,000.

Sand'ay, isl., Orkney group, Scotland; surface flat, except in W.; herring fishing. Area, 26 sq. m.; pop. 1,400.

Sand'bach, mkt. tn., Cheshire, England, 4½ m. N.E. of Crewe; manufactures boots and shoes, chemicals, and fustian. Pop. 6,400.

Sand'gate, wat.-pl., Kent, England, 1½ m. S.W. of Folkestone. Pop. 3,000.

Sand'hurst, par. and vil., Berks, England, 9 m. N. of Aldershot; about 2 m. S.E. is Royal Military Coll. for the training of officers. Wellington College is near by. Pop. 3,800.

San Diego (*dê-â'go*), city, California, U.S.A., on Pacific Ocean; health resort; good harbour; exports fruit; manufactures aeroplanes, furniture; fish canning. Pop. 148,000.

Sandoway. (1) Dist., Arakan, Lower Burma; mountainous and well wooded; small patches produce rice and tobacco. Area, 3,784 sq. m.; pop. 112,000. (2) Tn. in above, on Bay of Bengal; small coasting trade. Pop. 4,000.

San'down, wat.-pl., Isle of Wight, England, 6 m. s. of Ryde; picturesque situation and fine beach. Pop. 6,200.

Sand'ringham, par. and vil., Norfolk, England, 6 m. E. of the Wash; church of St. Mary Magdalene contains numerous memorials of the royal family. Sandringham House is a royal residence. Pop. 100.

Sandus'ky, city and port, Ohio, U.S.A., on Sandusky Bay, Lake Erie; chief products are paper goods, agricultural implements, and chemicals; fresh-water fisheries. Pop. 26,000.

Sand'wich. (1) Tn., Kent, England, on R. Stour; one of the Cinque Ports; now two miles from the sea. Pop. 3,300. (2) City, Ontario, Canada, on Detroit R., 4 m. s.w. of Windsor. Pop. 10,300.

Sandwich Islands. See HAWAIIAN ISLANDS.

San'dy, par. and vil., Beds, England, 8½ m. E. of Bedford; mkt. gardens; sand pits. Pop. (par.) 3,600.

Sandy Hook, peninsula, New Jersey, U.S.A., 6 m. long; America Cup yacht races take place in vicinity.

San Fernan'do, port, Spain, on Cadiz Bay; one of chief naval ports; naval academy, observatory; manufactures beer, leather, soap, rope, and sails; iron foundry and distilleries. Pop. 27,000.

San Francis'co, second largest city, California, U.S.A., and greatest commercial town on w. coast of America; at point of a peninsula separating San Francisco Bay from Pacific, and on strait known as Golden Gate giving access to the Pacific; seat of several departments of California Univ. and

of various educational establishments; fine parks; terminus of three trans-continental lines of railway; steamer services to China, Japan, Australia, and Hawaiian Islands; manufactures chemicals, motor-cars, agricultural and mining machinery; sugar and oil refineries, canneries, lumber mills; printing and publishing; exports precious metals, wheat, flour, tinned fruits and vegetables, timber, wine. San Francisco's prosperity dates from discovery of gold in California (c. 1849). In 1906 a terrible earthquake and fire caused great loss of life and destruction of property; town rapidly rebuilt. Pop. 637,000.

Sangerhausen (*zang'er-hou-zen*), tn., Saxony, Prussia, on R. Gonna, 30 m. w. of Halle; manufactures sugar and agricultural machinery. Pop. 12,000.

San José (*sân ho-sâ*). (1) Cap., Costa Rica, Central America; large coffee trade; cathedral. Pop. 63,000. (2) City, health resort, California, U.S.A., 40 m. s.e. of San Francisco; industries include canning of fruits and vegetables, lumber and planing mills, manufacture of woollen goods, leather, wine. Pop. 58,000.

San Juan (*sân hoo-ân*). (1) Prov., Argentina, S. America, bordering on Chile; mountainous, with plains to E.; drained by several streams; agriculture; wine; cattle rearing; gold, silver, copper; coal and iron found. Area, 37,865 sq. m.; pop. 162,000. (2) Cap. of above, on R. San Juan; exports wine; trade with Chile in cattle and dried fruit. Pop. 17,000. (3) Cap., Porto Rico, W. Indies; excellent harbour; naval station; cathedral; exports sugar, tobacco, coffee, fruits. Pop. 71,000.

San Juan del Norte. See GRAY-TOWN.

Sanlúcar de Barrameda (*sân-loo'har dâ bar-ra-mâ'da*), tn., port, and wat.-pl., Cadiz, Spain, at mouth of R. Guadalquivir; trade in wine and cereals; fisheries. Pop. 27,000.

San Luis (*sân loo-ês*). (1) Prov., central Argentina, S. America; mountainous in N., pampas in S.; grazing

important; some wheat, maize, alfalfa, fruit grown, under irrigation; gold mines. Area, 29,035 sq. m.; pop. 154,000. (2) Cap. of above, on Transandine Railway; grapes, oranges largely cultivated; horses, hides, and wool exported. Pop. 18,000.

San Luis Potosí (*sán loo-és' po-to'sé*), (1) Inland state, Mexico; chiefly plateau land; soil fertile; cereals, sugar, pepper; excellent grazing; large mineral resources, but little developed. Area, 24,004 sq. m.; pop. 446,000. (2) Cap. of above; riy. in.; clothing and cotton factories, railway workshops; large trade in wool, cattle, hides, and tallow. Pop. 57,000.

San Marino (*mā-rē'no*), small independent republic, N.E. Italy, 14 m. from Rimini, on Adriatic Sea; agriculture, cattle raising; wine, building stone, cattle exported. It claims to be oldest state in Europe. Area, 38 sq. m.; pop. 13,000.

San Miguel (*mē-gel'*), tn., S.E. Salvador, Central America; rubber, indigo, grain; famous annual fair. Pop. 39,000.

San Miniato, tn., Italy, on R. Arno, 28 m. W.S.W. of Florence; cathedral; glass, leather, hats, olive oil. Pop. 8,000.

San Nicolás de los Arro'yes, port, Argentina, S. America, on R. Paraná, 35 m. S.E. of Rosario; wheat, maize, wool, frozen mutton exported; extensive meat-preserving industry. Pop. c. 30,000.

San Pablo, tn., Luzon I., Philippines, 35 m. S.S.E. of Manila; rice and copra. Pop. 31,000.

Sanquhar (*sank'ar*), royal burgh, Dumfriesshire, Scotland, on R. Nith; coal mines, iron forges, brick and tile works. Pop. 1,800.

San Remo (*rā'mo*), port, Italian Riviera, on Gulf of Genoa, 28 m. E. of Nice; winter resort; produces olive oil, lemons, wine, and flowers. Pop. 21,000.

San Salvador, cap., Salvador, Central America, 25 m. from its port La Libertad; univ.; silk goods, cotton cloth, cigars, soap. Pop. 89,000.

San Sebastian (*sā-bās-tē-ān'*), port, Spain, on Bay of Biscay, near French frontier; exports wine, wool, skins, fruit; manufactures sailcloth, paper, cotton, glass, soap, candles; valuable fisheries. Pop. 76,000.

San Severo (*sā-vē'ro*), tn., Apulia, S. Italy, 20 m. N.W. of Foggia; wine and olive oil. Pop. 35,000.

San'ta An'a. (1) Tn., Salvador, Central America, 40 m. N.W. of San Salvador; centre of a coffee and sugar growing dist.; sugar, cigars, textiles, and pottery manufactured. Pop. 76,000. (2) Tn., S. California, U.S.A., 30 m. S.E. of Los Angeles; trade centre of rich fruit-growing valley, and of neighbouring oilfields; manufactures aeroplanes, farm implements, glass, preserved fruits, perfumes; fruit packing, canneries. Pop. 30,000.

Santa Barbara, coast tn., California, U.S.A.; wat.-pl.; fruit-growing centre; oilfield in neighbourhood. Pop. 34,000.

Santa Catharina (*kā-ta-rē'nā*), state, S. Brazil; with a low coastal zone bordering Atlantic Ocean, and a plateau to the W.; densely forested and drained by numerous streams; coffee and sugar are grown, also cotton, tobacco, wheat; Paraguay tea is exported, and coal is mined. Cap. Florianopolis. Area, 20,785 sq. m.; pop. 914,000.

Santa Clara. (1) Prov., central Cuba; fertile soil; sugar, coffee, fruits, wax, honey, timber, cattle, asphalt, gold, silver, and copper are produced. Area, 8,257 sq. m.; pop. 755,000. (2) Cap. of above; trade in sugar and cattle. Pop. 22,000.

Santa Cruz (*kroos*). (1) Wat.-pl., California, U.S.A., on Monterey Bay; fruit and vegetable canning; fisheries. Pop. 11,000. (2) Dep., central Bolivia, S. America; surface mostly flat; grazing; products include sugar, coffee, cacao, rice in W. portion. Area, 144,941 sq. m.; pop. 341,000. (3) Or **SANTA CRUZ DE LA SIERRA**, tn., cap. of Santa Cruz, Bolivia, on R. Piray; flour, sugar, leather; distilling. Pop.

30,000. (4) Or SANTA CRUZ DE TENERIFE, port and cap. of Canary Islands; good coaling station; exports wine; brandy, grain, silk, cochineal, sugar, and bananas. Pop. 53,000. (5) See SAINTE-CROIX.

Santa Fé. (1) Prov., Argentina, S. America; plain, drained by R. Paraná; agriculture and stock raising. Area, 50,713 sq. m.; pop. 1,251,000. (2) Cap. of above, on Salado R.; cathedral and provincial univ.; shipbuilding. Pop. 60,000.

San'tal Pargana's, dist., Bhagalpur, Bihar and Orissa, India; undulating country with alluvial plains; cereals; coal is mined. Chief commercial tn., Sahibganj, on R. Ganges, 35 m. E. of Bhagalpur. Area, 5,462 sq. m.; pop. 1,799,000.

San'ta Mar'ta, port and cap. of Magdalena, Colombia, S. America; important trade centre. Pop. 18,000.

San'ta Maura (*mou'ra*), isl. in Ionian Is., Greece; mountainous; produces much olive oil; wine, currants. Area, 110 sq. m.; pop. 30,000.

San'ta Mon'ica, tn., Los Angeles, California, U.S.A., on Pacific Ocean; popular seaside resort. Pop. 37,000.

Santander. (1) Prov., N. Spain, on Bay of Biscay; traversed by Cantabrian Mts. (Picos de Europa, 8,600 ft.); well wooded; rich pasture land; has iron and zinc mines; good harbours and maritime trade. Area, 2,108 sq. m.; pop. 353,000. (2) Cap. of above, on Santander Bay; large trade, chiefly in iron and zinc ore; fishing; cathedral; fashionable summer resort. Pop. 83,000.

Santarem, tn., Para, Brazil, on R. Tapajós, near confluence with R. Amazon; cacao, rubber, brazil nuts, tobacco, sugar, cattle. Pop. 42,000.

San'ta Ro'sa, tn., California, U.S.A., 50 m. N.W. of San Francisco; dairy produce, fruit, hops. Pop. 16,000.

Santiago, or SANTIAGO DE CHILE (*santi-yá-gó*), cap. of Chile, S. America; finely situated on w. slopes of Andes; cathedral, univ., national library; commercial centre; manufactures

leather, soap, beer, and foundry products. Pop. 507,000.

Santiago de Compostela, tn., Galicia, N.W. Spain; cathedral, univ.; has ruins of many religious houses; produces spirits, beer, chocolate, paper, and linen. Pop. 26,000.

Santiago de Cuba, port, S.E. coast, Cuba, W. Indies; cathedral; centre of mineral dist.; iron foundries, machine shops, tobacco factories, tanneries; chief exports are sugar, tobacco, timber, fruit, cacao, coffee, rum, iron ore. Pop. 49,000.

Santi'go del Estero (*es-tá'ro*). (1) N. central prov., Argentina, S. America; mostly level plains with salt-pans; alfalfa is chief crop; sugar, tobacco, cotton. Area, 55,385 sq. m.; pop. 361,000. (2) Cap. of above, on R. Dulce. Pop. 23,000.

San'to Domingo. (1) Republic, eastern portion of island of Haiti, W. Indies; surface generally mountainous, with fertile valleys between ranges; climate is hot in low districts, cooler in higher lands; large deposits of rock salt in S.W.; rich in minerals, but little worked; sugar is the chief crop; much forest; exports are coffee, cocoa, sugar, tobacco, logwood, mahogany. Area, 19,332 sq. m.; pop. 897,000. (2) Cap. of above, at mouth of R. Ozama; exports tobacco, sugar. Cathedral claims to contain tomb of Columbus. Pop. 31,000.

Santos (*sân-tôsh*), tn., chief port, São Paulo, Brazil, S. America. Chief coffee port of the world; also exports bananas, rubber, hides. Pop. 103,000.

San Vicente (*vê-sen'tá*). (1) Central dep. of Salvador; mountainous; has extinct volcanoes, active geysers, and hot springs. Pop. 93,000. (2) Cap. of above; indigo and tobacco plantations; cloth, silks, shoes, hats, and cigars. Pop. 35,000.

São Francisco (*sou fran-sês'ko*), riv., E. Brazil, S. America; rises in S.W. Minas Geraes and flows N. and E. in a great curve to enter Atlantic Ocean; navigation impeded by falls. Length, 1,800 m.

São Leopoldo, tn., Rio Grande do

Sul, Brazil, on R. Sinos; hats, leather goods, earthenware. Pop. 47,000.

São Luiz de Maranhão (*mã-rân-youn'*), port, cap. of Maranhão state, N.E. Brazil, S. America, on island of São Luiz; exports cotton and sugar. Pop. 53,000.

Saône (*sôn*), riv., France; rises in plateau of Langres; joined by R. Doubs at Verdun, then flows s. to join R. Rhone at Lyons; connected by canals with Rs. Meuse and Moselle, Marne, Rhine, Seine, Loire. Length, 301 m.

Saône-et-Loire (*sôn-â-lwâr*), dep., France; mountainous; watered by Rs. Saône, Loire, and Arroux; produces wine, coal, cattle, and cereals; flourishing manufactures of iron, steel, copper, bronze, and porcelain; distilleries, oil works, and chemical works. Cap. Macon. Area, 3,330 sq. m.; pop. 549,000.

São Paulo (*soun pou'lo*). (1) Coast state, s. Brazil, S. America. Surface consists of plateau in interior, crossed by several ranges, and low-lying coastal strip; much of surface forested; drained by affluents of R. Paraná. Chiefly an agricultural state; large cultivation of coffee, considerable crops of sugar-cane, cotton, tobacco, cereals, grapes, bananas. Manufactures cottons, wine, tobacco. Cap. São Paulo; chief port, Santos. Area, 112,278 sq. m.; pop. 6,176,000. (2) Cap. of above, on R. Tieté; cathedral, several monasteries, convents; great manufacturing centre; cotton, woolen, jute, glass, and furniture factories. Pop. 579,000.

São Salvador. See BAHIA (2).

Sapporo (*sap-ô-ro*), tn., cap. of Hokkaido, Japan; saw and flour mills, hemp and flax factories, breweries. Pop. 145,000.

Saragosa. (1) Prov., Aragon, Spain; mountainous in n. and w.; drained by R. Ebro. Area, 6,726 sq. m.; pop. 520,000. (2) Cap. of above, on R. Ebro; two cathedrals, univ.; rly. jn.; manufactures include beer, spirits, porcelain, woollens, silk, leather, iron goods. Pop. 156,000.

Sarajevo (*sâr-â-yêv'ô*), cap., Bosnia, Yugoslavia; manufactures pottery, silk, flour, sugar; carpet factories and hand-loom weaving; became famous as the scene of the murder of the Austrian heir-apparent and his wife (June 28, 1914), the event which precipitated the Great War. Pop. 65,000.

Saran', dist., Bihar and Orissa, India; alluvial plain watered by Rs. Ganges, Gandak, and Gogra; large crops of cereals, rice, sugar-cane, oil-seeds. Chief tn., Chapra, on R. Ganges, 35 m. above Patna. Area, 2,683 sq. m.; pop. 2,340,000.

Sarapul', tn. and river port, Ural Area, Russia, on Kama R., 130 m. s.w. of Perm; important centre for manufacture of boots, shoes, and gloves; rope factories, flax mills. Pop. 25,000.

Saratoga Springs, health resort, New York, U.S.A., 38 m. n. of Albany; famous mineral springs. Pop. 14,000.

Sarat'ov. (1) Province, Russia; steppe lands in s., hilly in n.; has large forests; drained by affluents of Rs. Don and Volga; soil fertile, producing cereals, flax, linseed, sunflowers, mustard. Area, 35,676 sq. m.; pop. 2,891,000. (2) Cap. of above, on R. Volga; commercial centre; distilleries, flour mills, tobacco factories, and ironworks; trade in corn; univ. Pop. 215,000.

Sarawak (*sâ-râ-wa*), state, Brit. N. Borneo; surface generally mountainous, and very well watered; produces timber, rubber, sago, pepper, rattans; minerals include coal, gold, silver, mercury; diamonds and sapphires found; large oilfield. Chief tn., Kuching. Area, c. 30,000 sq. m.; pop. c. 600,000.

Sardinia, large island in E. Mediterranean, forming a dep. of Italy; immediately s. of Corsica, from which it is separated by Strait of Bonifacio; surface mountainous; almost equally divided between forest, arable land, and pasture; drained by Rs. Tirso, Samassi, and Flumendosa. Climate hot and unhealthy in lower districts.

Produces lead, zinc, silver, lignite, and blende. Forest products, oak, olive, and other timber; cork, tanning bark, charcoal. Principal industry is agriculture; wheat, barley, and other crops grown; fruit largely cultivated; horses, cattle, sheep, and goats reared. Wine largely produced; tunny, sardine, and anchovy fisheries. Chief tn., Cagliari. Area, 9,299 sq. m.; pop. 864,000.

Sargasso Sea, part of Atlantic Ocean; first discovered by Columbus; in belt of calms between Gulf Stream and North Equatorial Current, extending from W. Indies to 40° w. longitude; remarkable for its floating gulf-weed, but surface not continuously covered; s. edge of this sea is spawning ground of the fresh-water eel.

Sarisbury (sārs' or sārs'), par. and vil., Hants, England, 6½ m. s.e. of Southampton; early strawberries cultivated. Pop. (par.) 4,000.

Sark, one of Channel Islands, English Channel; consists of Great and Little Sark, connected by Coupée isthmus; scenery wild and beautiful; fishing and farming. Chief landing-place, Creux; length, 3½ m. Pop. 600.

Sarnia, tn., Ontario, Canada, on R. St. Clair; oil refineries; manufactures castings, machinery, woollens. Pop. 15,000.

Sarno, tn., Salerno, Italy, 20 m. E. of Naples; wine, paper, leather goods; mineral springs; cathedral. Pop. 15,000.

Sarpsborg, port, Norway, on R. Glommen, 10 m. from Oslo Fjord; manufactures chemicals, wood pulp, paper, aluminium; textiles. Pop. 11,000.

Sarrebourg (sār-boor') (German *Saarburg*), tn., s. Moselle, France, on R. Saar, 44 m. by rail n.w. of Strasbourg; watch springs, gloves, lace; belonged to Germany (1871-1918). Pop. 9,000.

Sarreguemines (sar-ge-mîn') (German *Saargemünd*), tn., Lorraine, France, on R. Saar; manufactures porcelain, leather, matches, papier-mâche boxes. Pop. 13,000.

(3,601)

Sarthe (sarf). (1) Riv., France; at Angers joins R. Mayenne, trib. of R. Loire. Length, 165 m. (2) Dep., France; traversed by R. Sarthe; generally flat or undulating; well wooded; fertile; barley, hemp, and apples extensively grown; horses and cattle reared; minerals include coal, marble, freestone; manufactures hemp, linen; potteries, iron foundries, distilleries, flour mills. Cap. Le Mans. Area, 2,410 sq. m.; pop. 387,000.

Sarzana (sard-zā'nā), tn., Genoa, Italy, 7 m. E. of Spezia; wine, olives, and silk are exported. Pop. 11,000.

Saskatchewan ('rapid river'). (1) Riv., Canada; rises in two branches (N. Saskatchewan and S. Saskatchewan) in Rocky Mts.; flows E. through Cedar Lake into Lake Winnipeg, and thence by Nelson R. to Hudson Bay. Total length, c. 1,200 m. (2) Prairie prov., Canada; bounded N. by Mackenzie dist., E. by Manitoba, S. by U.S.A., W. by Alberta. Crossed in S. by Saskatchewan R.; considerable area forested; many lakes; several Indian reserves; largest wheat-growing prov.; also produces oats, barley, flax; excellent fisheries; live-stock raised and large butter output; trades in furs; coal is mined; enormous quantities of wheat are exported annually. Cap. Regina. Area, 251,700 sq. m.; pop. 821,000.

Saskatoon, town, Saskatchewan, Canada, on S. Saskatchewan R., 150 m. n.w. of Regina; univ.; agricultural coll.; wood-working factories, flour mills; cement. Pop. 31,000.

Sassari. (1) Prov., Italy, forming N. part of Sardinia; mountainous; produces corn, tobacco, wine, olives. Area, 2,903 sq. m.; pop. 283,000. (2) Cap. of above; cathedral; univ.; trade in oil, grain. Pop. 51,000.

Satara. (1) Dist., Bombay, India, in W. Ghats; watered by Rs. Bhima and Kistna and their tribs.; sugarcane, pulses, and millet grown; much timber. Area, 4,916 sq. m.; pop. 1,026,000. (2) Cap. of above, 60 m. S. of Poona; manufactures brass ware. Pop. 22,000.

Satpura, mt. range, Central Provs., India, stretching 600 m. E. to W., greatest breadth 100 m.; densely wooded; highest point, 4,500 ft.

Satsuma (*sāt-soo mā*), former prov., s.w. Kyushu, Japan; in prefecture of Kagoshima; noted for fine porcelain (Satsuma ware).

Sat'ul-Mar'e, formerly SZATMAR-NEMETI, tn., Romania, on Hungarian border; on R. Somesul; pottery; textile weaving. Pop. 35,000.

Sau'gor. (1) Dist., Central Provs., India; plain, with hilly undulations, watered by many streams; cereals grown; sandstone quarries. Area, 3,662 sq. m.; pop. 528,000. (2) Cap. of above, 100 m. N.W. of Jubbulpore; built round lake (alt. 1,940 ft.); railway station; exports salt, sugar, cloth. Pop. 39,000. (3) Isl. at mouth of R. Hughli, Bengal, India; Hindu pilgrim resort.

Sault Sainte-Marie (*soo sint-mā'ri*). (1) Or The Soo, rapids in the St. Mary's R., which connects L. Superior and L. Huron and forms part of the boundary between Ontario, Canada, and Michigan, U.S.A. Passage for shipping is provided by two great canals on the Canadian and U.S.A. sides respectively, which carry more shipping than any other canal in the world, though ice-bound for over four months every year. (2) Tn., Ontario, Canada, on St. Mary's R., at the Canal; copper, iron, cobalt, and silver mines in vicinity. Pop. 21,000. (3) Tn., Michigan, U.S.A., on St. Mary's R., connected with preceding by rly. bridge over river; important lumber, paper, flour, and woollen mills; manufactures dredges, engines, boats. Pop. 14,000.

Saumur (*sā-moor*), tn., Maine-et-Loire, France, on R. Loire, 27 m. S.E. of Angers; noted for white wine; manufactures brandy, liqueurs, enamels, rosaries. Pop. 14,000.

Santerres (*sā-tern*), vil., Gironde, France, c. 35 m. S. of Bordeaux; gives name to white wines of dist. Pop. 1,000.

Sava, river, Yugoslavia; rises in

Alps in Carniola, and falls into R. Danube at Belgrade. Length, 442 m.

Savan'nah, port, Georgia, U.S.A., on R. Savannah; exports cotton, timber, rice, flour, and tobacco; manufactures manure, turpentine, soap, and sugar. Pop. 85,000.

Savantwad'i, Indian state, Bombay, India, bounded on S. by Goa; hilly and thickly wooded; coconuts and betel nuts. Area, 926 sq. m.; pop. 206,000.

Saverne (*sā-vern*) (German *Zabern*), tn., Bas-Rhin, France, 27 m. by rail N.W. of Strasbourg; at entrance to pass through Vosges Mts.; tanneries. Pop. 7,000.

Savoie (*sā-voī*), dep., S.E. France; mountainous; watered by R. Isère; chiefly under pasture; cheese and dairy products are important; mineral springs. Cap. Chambéry. Area, 2,388 sq. m.; pop. 231,000.

Savo'na, port, Genoa, Italy; cathedral; centre of Italian iron industry; shipbuilding yards, railway workshops; manufactures tinplate and glass. Pop. 66,000.

Saw'bridgeworth (or *sāls'worth*), urb. dist., Herts, England, 4 m. S. of Bishop's Stortford; plant nurseries; malt trade. Pop. 2,600.

Saw'ley and **Wils'thorpe**, par. and vil., Derbyshire, England, on R. Trent, 8 m. E.S.E. of Derby; lace making. Pop. (par.) 3,500.

Sax'e - Al'tenburg, **Sax'e - Co'burg-Gotha**, **Sax'e - Mein'ingen**, **Sax'e - Wei'mar-Eisenach**, states of the former German Empire, all of which except Gotha merged (1919) in the rep. of Thuringia; Gotha merged with Bavaria (1920).

Sax'ony. (1) Rep., Germany; bounded W., N., and E. by Prussia, S. by Czechoslovakia, W. by Bavaria and Thuringia; length, 130 m.; breadth, 93 m. Flat in N.W.; mt. ranges mainly in S. and S.E.; Erzgebirge on Bohemian border, and the picturesque Saxon Switzerland on both sides of R. Elbe. Chief rvs. are Elbe, Mulde, Schwarze Elster. Climate healthy. Extensive forests (mainly fir and pine),

and fine arable and pasture land. Saxony is a great industrial centre, and an important agricultural and mining country. Chief products are rye, wheat, barley, potatoes, oats, beet, hay, vegetables, fruit, timber. Cattle, swine, geese, and poultry are reared. Principal manufactures, textiles, machinery, porcelain, glass, chemicals, musical instruments, watches, printing, typefoundry, lace, paper, toys, tobacco, beer, spirits. Coal, iron, cobalt, tin are mined; numerous mineral springs. Chief tns., Leipzig, Dresden (cap.), Chemnitz. Area, 5,786 sq. m.; pop. 4,994,000. (2) Prov., Prussia; watered by R. Elbe; includes parts of Harz Mts. and Thuringian Forest; parts of soil very fertile; produces cereals and sugar-beets; goats reared; has salt, coal, and copper mines; mineral springs; extensive manufactures. Cap. Magdeburg. Area, 9,759 sq. m.; pop. 3,277,000.

Sayan Mountains, *s.* continuation of Altai Mts., Asia, forming boundary between Siberia and *n.w.* Mongolia; some parts well wooded; highest peak, Munko Sardyk (11,450 ft.).

Scafell (*skaw'fel*), *mt.*, Lake District, Cumberland, England; 15-in. gauge railway has been constructed to the summit. Scafell Pike, separated from Scafell by a ravine, is highest peak in England (3,210 ft.) and belongs to the nation.

Scalby, *urb. dist.*, N. Riding, Yorks, England, 3 m. *n.w.* of Scarborough; residential dist. Pop. 2,800.

Scalloway, port, Shetland, Scotland, on *w.* coast of Mainland, 6 m. *w.* of Lerwick; fishing; anc. cap. of Shetland. Pop. 700.

Scandinavia, peninsula, *n.* Europe; includes Norway and Sweden; name also loosely applied to lands of Scandinavian peoples, *i.e.* Norway, Sweden, and Denmark. See articles on separate countries.

Scapa Flow, large expanse of sheltered waters in *s.* Orkney, Scotland, with an area of c. 100 sq. m. Surrounded by Mainland, Burray, S.

Ronaldsay, and Hoy. Entrances by Hoy Sound (*w.*), Hoxa Sound (*s.*), and Holm Sound (*e.*). Chief naval base during Great War. After surrender of German fleet, vessels were interned in the Flow, but scuttled by order of Rear-admiral von Reuter. The hulls of many of the ships have been raised and broken up.

Scarborough, *munic. bor.*, port, and fashionable *wat.-pl.*, N. Riding, Yorks, England, on North Sea; mineral springs; fisheries. Pop. 41,800.

Scarpe, river, France, *depts.* Pas-de-Calais and Nord; rises on plateau of Artois, $7\frac{1}{2}$ m. *e.* of Saint Pol; flows *e.s.e.* past Arras, then *n.e.* past Douai, and finally unites with R. Schelde near Belgian frontier. Length, 62 m.

Schaffhausen (*shaf'how-sen*). (1) Canton, Switzerland, *n.* of R. Rhine; undulating, fertile; chief occupations, agriculture and vine culture; forest products are important. Area, 114 sq. m.; pop. 53,000. (2) Cap. of above, on R. Rhine near famous falls; manufactures iron, steel, and aluminium ware; cotton goods, soap; breweries and distilleries. Pop. 22,000.

Schaumburg-Lippe (*shoum'boorg-lip'a*), republic, Germany, between Westphalia and Hanover; part of N. German plain, hilly towards *s.*; agriculture and coal mining. Cap. Bückeburg. Area, 131 sq. m.; pop. 49,000.

Schelde, or **SCHELDT** (*shel'de*), river, France, Belgium, and Holland; rises in Aisne *dep.*, and enters North Sea; passes Valenciennes, Tournai, Oudenarde, Ghent, Termonde, Antwerp; navigable to Cambrai, where a network of canals connects it with basins of Rs. Oise and Somme; principal tribs., Lys and Dendre. Length, 250 miles.

Schenectady (*shen-ek'ta-de*), city, New York, U.S.A., on R. Mohawk; electrical works, foundries, and locomotive works; knitted goods, agricultural implements. Pop. 96,000.

Scheveningen (*shä'ven-ing-en*), fashionable seaside resort, Holland, 2 m. *n.w.* of The Hague; imposing

Kurhaus; important fisheries. Pop. 23,000.

Schiedam (*shē-dam*), tn., Holland, 3 m. w. of Rotterdam, on R. Schie; noted for gin and other liquors; candles and yeast; cork-cutting. Pop. 45,000.

Schiehallion (*shē-hal'yun*), isolated mountain, Perthshire, Scotland, 11 m. n.w. of Aberfeldy; alt. 3,547 ft.; owing to regularity of outline was scene of experiments (1774) by Dr. Nevil Maskelyne to ascertain the mean density of the earth.

Schleswig (*shlās'vig*), port, E. Schleswig-Holstein, Prussia, on Schlei inlet; tanneries, flour mills; fishing. Pop. 20,000.

Schleswig-Holstein (*shlās'vig-hol'shtn*), province, n.w. Prussia, s. of Denmark; surface generally plains and moors; agriculture important; live-stock raised; manufactures textiles, tobacco, beer; fishing carried on. Cap. Schleswig. Area, 5,815 sq. m.; pop. 1,519,000.

Schmalkalden (*shmal-hal'den*), tn., summer resort, Hesse-Nassau, Prussia, 30 m. s.w. of Erfurt; manufactures iron and steel goods, toys, beer, soap. Pop. 10,000.

Schneeberg (*shnā'berg*), tn., Saxony, Germany, 20 m. s.w. of Chemnitz; lace, embroidery, shoes. Pop. 9,000.

Schneidemühl (*shnī'da-mool*), cap., Grenzmark, Prussia, on R. Cuddow, 50 m. n. of Posen; manufactures iron goods, lumber, bricks, starch. Pop. 38,000.

Schönebeck (*shoo'na-bek*), tn., Saxony, Prussia, Germany, on R. Elbe, 9 m. s. of Magdeburg; salt is chief product; manufactures chemicals, machinery, explosives. Pop. 21,000.

Schwabach (*shuā'bach*), tn., Bavaria, Germany, 9 m. s.w. of Nuremberg; manufactures needles, wire, silver, brass, and steel goods. Pop. 11,000.

Schwarzwald. See BLACK FOREST.

Schweidnitz (*shuid'nits*), tn., Silesia, Prussia, on R. Weistritz, 28 m. s.w. of Breslau; manufactures textiles, leather, paper, agricultural implements, machinery; beer. Pop. 31,000.

Schweinfurt (*shwīn'foort*), tn., N. Bavaria, Germany, on R. Main; manufactures machinery, bicycles, soap, tobacco, paint. Pop. 36,000.

Schwelm (*shwelm*), tn., Westphalia, Prussia, 3 m. E. by N. of Barmen; manufactures iron and steel goods, textiles; in vicinity are the Harkort iron and sulphur mines. Pop. 20,000.

Schwerin (*shwā-rén*) ('game preserve'), cap., Mecklenburg-Schwerin, N. Germany, on Lake Schwerin; chief buildings are the former ducal palace and 15th cent. cathedral; manufactures furniture, pianos, varnish, soap, bricks. Pop. 48,000.

Schwyz (*shwits*). (1) Canton, Switzerland; extends along N.E. shore of Lake of Lucerne; agricultural and pastoral; highest point, Böser Faulen (9,199 ft.). Gives its name to Switzerland. Area, 348 sq. m.; pop. 62,000. (2) Tn., cap. of above, 18 m. E. of Lucerne. Pop. 8,000.

Sclacca (*shā'ka*), port, Girgenti, Sicily, on s. coast; cathedral; trade in sardines, olives, coral; hot mineral springs are near by. Pop. 20,000.

Silly Isles (*sīl'is*), group of islands lying 25 m. s.w. of Land's End, England; largest is St. Mary's, next in importance being Tresco and St. Martin's; mild climate; most of inhabitants employed in cultivating early vegetables and flowers for London market; fisheries. St. Mary's contains the only town, Hugh Town. Area, over 6 sq. m.; pop. 1,700.

Seone (*skoön*), vil. and par., Perthshire, Scotland, on R. Tay, 2 m. n. of Perth; royal residence and place of coronation for Scottish kings from 1153 to 1488. Pop. (par.) 2,900.

Scottish Corner, meeting-place of roads, N. Riding, Yorks, England, 4 m. N.E. of Richmond; here Scottish traffic from s. along Watling Street divided, part passing N.W. to Carlisle, remainder continuing N. to Carter Bar, or to Berwick; now important motor road junction.

Scotland, N. part of Great Britain; bounded by England and Solway Firth on s., Atlantic Ocean on w. and

N., North Sea on E.; greatest breadth, 146 m.; greatest length, 274 m.; coastline (2,300 m.) is exceedingly irregular, esp. in W. Chief island groups are Outer and Inner Hebrides in W., and Orkney and Shetland Islands in N. Scotland is divided into three regions by two lines of faulting. One series of faults, stretching from Stonehaven in E. to Arran in W., separates the Highlands from the Midland Valley or Central Lowlands; the other, from Dunbar to Girvan, separates the Central Lowlands from the Southern Uplands. The Highlands are divided into two parts by Glenmore; loftiest heights occur in Grampian plateau S.E. of Glenmore, where several summits rise above 4,000 ft. (Ben Nevis, 4,406 ft., is the highest peak in the British Isles). In the Highland region are low-lying and fertile areas along E. coast. The Central Lowlands are crossed by parallel ranges of low hills. The more important stretches of low ground are Strathmore, between the Sidlaws and the Grampians; Carse of Gowrie, between the Sidlaws and the Firth of Tay; the valleys of Rs. Forth and Clyde; and the Ayrshire coastal plain. No part of the Southern Uplands reaches 3,000 ft. (highest peak, Merrick, 2,764 ft.); and the Merse, in the lower basin of R. Tweed, is the largest continuous area of low ground in Scotland. Chief rvs. flowing E. are Tweed, Forth, Tay, S. Esk, Dee, Don, Deveron, and Spey. On W. and S. chief rivers are Clyde and Nith. In the Highland area are numerous lochs or lakes, the largest being Loch Lomond.

Climate is equable; agriculture is pursued in the drier E. and grazing in the W. About 22 per cent. of the surface is uncultivable. Much of the Highlands is covered with peat and heather, and used as grouse moors and deer forests. The Central Lowlands contain much fine arable and pasture land. The Southern Uplands afford excellent sheep pasture, while the plain land that borders them in the W. is the dairy region of Scotland. The

Merse is one of the richest agricultural districts in the country. Oats is the chief cereal. Wheat is produced in the Lothians, Fife, and the Merse, where the average number of bushels to the acre is the largest in Great Britain. Barley, potatoes, and roots are other E. coast crops. Important fruit-growing districts are the Carse of Gowrie, and round Blairgowrie, and in Lanarkshire. Notable breeds of cattle are Ayrshire (dairy), black-poll Aberdeen-Angus (beef), West Highlanders or kylos, and black-poll Galloways. Clydesdale gives its name to a famous breed of horses. The sea-fisheries, esp. herring, are very important.

In the Midland Valley are extensive coalfields, with iron ore, now nearly exhausted, near the coal. Other minerals are oil shale, granite, slate, and lead. The most important manufactures are those of textiles, metals and machinery, and shipbuilding. The cotton industry centres chiefly in Glasgow and Paisley, the latter noted for its thread. Woollen cloth (tweed) is manufactured in the towns of the R. Tweed valley; linen is manufactured in several Angus towns and in Duffermline, Jute in Dundee, and linoleum in Kirkcaldy. Glasgow is the centre of a region noted for its machinery and iron-smelting. The Clyde area is the largest shipbuilding district in the world. Aluminium works, dependent on water power, exist at Kinlochleven, the Falls of Foyers, and Fort William. Paper is manufactured in Midlothian; Edinburgh, next to London, is the greatest printing centre in the U.K.; whisky is distilled in the Highland districts, and sugar refining is carried on at Greenock.

The railways are grouped into two systems—the London and North Eastern Railway, and the London, Midland, and Scottish Railway—the main lines of which connect Edinburgh and Glasgow with London and the S., and also with all the principal towns in Scotland. The W. ports trade chiefly with America, the W. of Eng-

land, and Ireland; the *s.* ports chiefly with the countries bordering the North Sea and the Baltic.

Scotland is exceedingly popular as a holiday resort, and the Highlands afford splendid shooting, deer-stalking, and fishing. There are univs. at St. Andrews, Glasgow, Aberdeen, and Edinburgh. Scotland is divided into 33 counties. Edinburgh is the cap., and Glasgow the largest tn. Area, 29,796 sq. m.; pop. 4,843,000.

Scran'ton, city, N.E. Pennsylvania, U.S.A., on R. Lackawanna; in great anthracite coal region, and coal mining is chief industry; rolling mills, steel works, machinery, locomotives, silk goods. Pop. 143,000.

Seun'thorpe and Frodingham, urb. dist., Lincolnshire, England, 12 m. S.E. of Goole; blast furnaces and steel works. Pop. 33,800.

Seu'tari. (1) Tn., Asia Minor, on Bosphorus opposite Constantinople, of which it is a suburb; manufactures silk, cotton, and muslin. Pop. 125,000. (2) Tn., Albania, on Lake Scutari; castle, cathedral; manufactures small-arms, textiles, and exports grain, wool, tobacco, hides. Pop. 24,000.

Sea'ford, urb. dist. and wat.-pl., Sussex, England; formerly one of Cinque Ports; fishing. Pop. 6,600.

Sea'ham Harbour, urb. dist. and port, Durham, England, $5\frac{1}{2}$ m. S. of Sunderland; coal port; bottles, chemicals; imports timber. Pop. 19,400.

Sea'thwaite. (1) Par., N. Lancs, England, 5 m. W. of L. Coniston; fine scenery of Duddon valley. (2) Vil., Cumberland, England, at head of Borrowdale, 8 m. S. of Keswick; heaviest rainfall in England (mean ann. 130 in.).

Seaton, urb. dist., S.E. Devon, England, near mouth of R. Axe; wat.-pl. Pop. 2,400.

Sea'ton, NORTH, coast par. and vil., Northumberland, England, 3 m. N. of Blyth; collieries. Pop. (par.) 2,000.

Seaton Carew (*se'ton ka-roo'*), wat.-pl., Durham, England, 2 m. S. of and in co. bor. of W. Hartlepool; residential dist. Pop. 2,170.

Sea'ton Del'aval, urb. dist., Northumberland, England, 3 m. S.W. of Blyth; collieries; manufactures chemicals. Pop. 7,400.

Seattle (*se-atl*), principal port, Washington, U.S.A., on Puget Sound; State univ.; fine cathedral; ship-building, fish canning, glass making, and lumber trade; whaling and fishing centre; coal found in district; great trading centre. Pop. 366,000.

Sebastopol. See SEBASTOPOL.

Seben'ico. See SIBENIK.

Sebu (*se-boo'*). (1) Isl. and prov., Philippine Is.; mountainous; forested; coal. Area, 1,695 sq. m.; pop. 855,000. (2) Port, cap. of above; exports copra, tobacco, sugar. Pop. 66,000.

Secunderabad', tn., Hyderabad, India, 6 m. N.E. of Hyderabad, of which it forms a suburb; one of largest military stations in India. Pop. 9,500.

Seda'lia, city, Missouri, U.S.A., 80 m. E.S.E. of Kansas City; in agricultural, coal mining, and limestone region; manufactures machinery, locomotives, textiles, flour; meat-packing industry. Pop. 21,000.

Sedan', tn., frontier fortress, Ardennes, France, on R. Meuse; chief industries are machinery, metal ware, woollens, flour; battle of Sedan in Franco-German war (1870) resulted in total defeat of French. Pop. 16,000.

Sed'bergh, mkt. tn. and par., Yorks, England, 10 m. E. of Kendal; manufactures woollens; public school. Pop. (par.) 2,600.

Sedge'moor, marshy tract, Somersetshire, England, 5 m. S.E. of Bridgwater; largely reclaimed for pasture; Monmouth's rebellion quelled here (1685).

Sedg'ley, urb. dist., Staffs, England, 4 m. S.W. of Wolverhampton; manufactures nails, gas retorts, hardware; coal, limestone, ironstone, and fire-clay are worked. Pop. 19,300.

Seeland. See ZEALAND.

Seghill, urb. dist., Northumberland, England, 6 m. N.W. of North Shields; coal mining. Pop. 2,600.

Sego'via. (1) Prov., Spain; tableland producing flax, wheat, rye, barley; live-stock raised. Area, 2,635 sq. m.; pop. 174,000. (2) Cap. of above, 42 m. N.N.W. of Madrid; cathedral; formerly cloth centre of Spain; iron goods, earthenware, paper, porcelain, flour. Pop. 16,000.

Seine (sân). (1) Riv., France, rises in Côte-d'Or Mts., flows with a winding course to N.W.; enters Eng. Channel at Havre; receives as tribs. the Aube, Marne (which joins it above Paris), Oise, Yonne, Loire, Essonne; length, 482 m.; connected by elaborate system of canals with Rs. Loire, Rhone, Rhine, Somme, Schelde. Navigable for ocean vessels as far as Rouen, and for vessels of 1,000 tons up to Paris. (2) Dep., France; traversed by R. Seine; low hills; market gardening is chief industry; gypsum and freestone quarries; includes all Paris and part of suburbs; most densely populated dep. of France. Area, 185 sq. m.; pop. 4,629,000.

Seine-et-Marne (sân-â-mâr-né), dep., France; low plateau drained by Rs. Seine and Marne; fertile region of La Brie between the two rivers; produces grain and 'Brie' cheese. Viticulture; flagstone and gypsum quarries; manufactures beet sugar, paper, porcelain. Cap. Melun. Area, 2,275 sq. m.; pop. 380,000.

Seine-et-Oise (sân-â-wâz), dep., France; drained by Rs. Seine and Oise; surface in parts hilly and forest-covered; vineyards and good pastures; wheat, fruit, vegetables grown; manufactures machinery, chemicals, gunpowder, sugar, paper, porcelain; building stone and gypsum quarried. Cap. Versailles. Area, 2,184 sq. m.; pop. 1,138,000.

Seine-inférieure (sân-an-fâ-re-oor'), maritime dep., France; drained by R. Seine; undulating and generally fertile; wheat, oats; dairy farming; large quantities of butter and cheese; important textile, iron, and shipbuilding industries; manufactures flax, chemicals, tobacco, dyes, cider; productive fisheries; contains ports of

Havre and Dieppe. Cap. Rouen. Area, 2,448 sq. m.; pop. 885,000.

Seistan (si-stân'), region in S.W. Asia, between S.W. Afghanistan and E. Persia, deriving its name from Lake Seistan, a large swamp in W. of Afghanistan; considerably more than half belongs to Afghanistan, the remainder to Persia; surface is chiefly steppe land, but large area is rendered fertile by periodic floodings of Lake Seistan; produces cereals, pulse, cotton, wool, fruits. Some of native tribes are nomadic. Area, 7,000 sq. m.; pop. 205,000.

Sekondi', port, Gold Coast, British W. Africa; an old trading station and important business centre; rail connection with Takoradi harbour. Pop. 10,000.

Selangor', Federated Malay State, on W. coast of Malay Peninsula; drained by R. Selangor and other rivs.; produces tin, coffee, rice, pepper, rubber. Cap. Kuala Lumpur. Area, 3,150 sq. m.; pop. 401,000.

Sel'borne, par. and vil., Hants, England, 16 m. W.N.W. of Winchester; birthplace of Gilbert White, the naturalist. Pop. (par.) 2,000.

Sel'by, urb. dist., W. Riding, Yorks, England, on R. Ouse, 15 m. S. of York; Benedictine abbey; manufactures rope, twine, mustard; malting and shipbuilding. Pop. 10,100.

Selen'ga-Ork'hon, riv., Central Asia; rises in N.W. Mongolia in two streams (Selenga and Orkhon); falls into Lake Baikal. Length, 750 m.

Sel'kirk, royal burgh and co. tn., Selkirkshire, Scotland, on R. Ettrick; tweed and hosiery mills; formerly noted for manufacture of brogue shoes, hence the name 'souters (shoemakers) of Selkirk.' Pop. 5,700.

Sel'kirk Mountains, mt. range, British Columbia, Canada; W. of Rocky Mts., and bounded E., N., and W. by Columbia R. Alpine in character, with snowfields and glaciers; highest peak, Sir Donald (10,645 ft.). Canadian Pacific Rly. crosses the range by Roger's Pass (4,300 ft.).

Sel'kirkshire, inland co., S.E. Scot-

land; surface generally mountainous; highest point, Broad Law; contains St. Mary's Loch; beautiful pastoral scenery; drained by Rs. Tweed, Ettrick, Yarrow; has extensive sheep farming and manufactures of woollen cloth; tanning. Co. tn., Selkirk. Area, 267 sq. m.; pop. 22,600.

Sel'ma, city, Alabama, U.S.A., on Alabama R.; centre for dairy and lumber products; cotton factories, structural iron and bridge works; manufactures cotton-seed oil, fertilizers. Pop. 16,000.

Selmechanya (*sel-mets-ban'ya*), tn., Czechoslovakia, 65 m. n. of Budapest; famous silver mines; potteries. Pop. 13,000.

Sel'sey, or **SELSEA**, par. and vil., Sussex, England, 7 m. s. of Chichester; beside cape known as Selsea Bill; fisheries; cathedral now beneath the sea. Pop. (par.) 3,600.

Semarang. (1) Residency, Java, Dutch E. Indies; coastal plain backed by hills and mountains; well watered; sugar and coffee in w.; petroleum and teak in e. Area, 11,300 sq. m.; pop. 2,787,000. (2) Cap. and port of above, on n. coast; exports sugar and kapok. Pop. 147,000.

Semipalatinsk, tn., Kazak, U.S.S.R., on island in R. Irtysh, 470 m. s.e. of Omsk; distilleries, breweries, leather factories, and flour mills. Pop. 57,000.

Semlin. See **ZEMUN**.

Sem'ering Pass, pass in Austrian Alps between Vienna and Graz; lowest of the great passes across Alps; summit, 3,225 ft.

Semnan, tn., Persia, 110 m. e. of Tehran; in centre of tobacco-growing region; very anc. tn.; noted for cotton goods and almond paste. Pop. 20,000.

Sendai (*sen-di*), tn., Honshu, Japan, on e. coast; trade in fish and salt. Pop. 143,000.

Senegal. (1) River, French W. Africa; flows through the colony of Senegal, to which it gives its name, and flows into Atlantic near St. Louis; has large number of tributaries from

the s. Sudan; navigation interrupted by Kayes rapids; length, 1,000 m. (2) Colony, French W. Africa; bounded n. by Mauritania, e. by R. Falerne, trib. of R. Senegal, s. by French Guinea and Portuguese Guinea, and w. by Atlantic Ocean. Surface mountainous in e., flat in w.; watered by Rs. Senegal and Gambia; sheep, goats, cattle, asses, and horses reared; produces ground-nuts, rubber, oil-seeds, millet, maize, rice; salt industry; weaving and pottery. Chief exports, ground-nuts, cotton, gum. Cap. St. Louis. Area, 74,112 sq. m.; pop. 1,318,000.

Senigallia, tn., Italy, on Adriatic Sea, 15 m. n.w. of Ancona; famous fair held annually till 1869. Pop. 12,000.

Senj (*sen'yi*), tn., Croatia-Slavonia, Yugoslavia, on Adriatic Sea; trades in fish, salt, and tobacco. Pop. 3,000.

Sen'lae, heath between Hastings and Battle, Sussex, England; site of battle of Hastings (1066).

Sennar, dist., Anglo-Egyptian Sudan, Africa, lying between Rs. Blue Nile and White Nile; produces durra, wheat, sesame, and other cereals, cotton, tobacco, vegetables; Sennar Dam at Makwar irrigates region known as El Gezira. Cap. Sennar.

Sens (son), tn., Yonne, France, on R. Yonne, 63 m. s.e. of Paris; walled tn.; 12th cent. Gothic cathedral; manufactures boots and shoes, agricultural implements, chemicals, cutlery; flour mills and tanneries. Pop. 15,000.

Sensée (*son-si*), river, depts. Pas-de-Calais and Nord, France, rises s.e. of Arras and flows through Haucourt to Arleux, where it is canalized to its junction with the Schelde at Bouchain; length, 40 m.

Sen'ta, tn., Yugoslavia, on R. Tisa, 30 m. s. of Szeged; centre of trade in live-stock and agricultural produce. Pop. 31,000.

Seoul (*se-ool*), cap., Korea; city walls, 20 to 30 ft. high; an open port and important railway centre; manufactures brass ware, pottery, fans, and silk. Pop. 315,000.

Seraing (*se-rang'*), tn., Liège, Belgium, on R. Meuse; large engineering and machinery works. Pop. 44,000.

Serajevo. See SARAJEVO.

Serampore, tn., Bengal, India, on R. Hooghly; hand weaving of cotton and silk; bricks, pottery, mats. Pop. 33,000.

Serbia, former Balkan kingdom, now principal state of Yugoslavia. Cap. Belgrade. See YUGOSLAVIA.

Serena (*sā-rā'nā*), tn., cap. of Coquimbo, Chile, on R. Coquimbo, 220 m. N. of Valparaíso; brewing and fruit preserving. Pop. 15,000.

Ser'es, tn. on Lake Takhino, Macedonia, Greece, 45 m. N.E. of Salonika; cottons, woollens; trades in wool, cereals, rice, tobacco, hides. Pop. 30,000.

Sereth. See SIRET.

Serginsk, UPPER AND LOWER, two tns., Ural Area, U.S.S.R., 58 m. S.E. of Sverdlovsk; ironworks; mineral waters in dist. Pop. (united) c. 30,000.

Sergipe (*ser-zhē'pā*), state, N.E. Brazil, S. America; forested coast lands with hilly country behind; much of it fertile; tobacco, cotton, sugar, maize. Cap. Aracaju. Area, 15,089 sq. m.; pop. 540,000.

Seringapatam, tn., Mysore, India, on isl. in R. Cauvery, 10 m. N.E. of Mysore; fort stormed by Brit. (1799). Pop. 7,500.

Serukhov, riv. port, central Russia, on R. Nara, 57 m. S. of Moscow; manufactures paper, textiles, chintz, leather, chemicals; copper and iron works. Pop. 56,000.

Ser'sa Aurunca (*ou-roon'ka*), tn., Italy, 32 m. N.N.W. of Naples; old cathedral, Roman remains; wine-growing centre. Pop. 21,000.

Ses'tri Ponente, tn., Italy, 3 m. W. of Genoa; summer resort; ship-building yards, machinery workshops, alabaster quarries. Pop. 26,000.

Settle, mkt. tn. and par., Yorks, England, on R. Ribbles, 13 m. N.W. of Skipton; manufactures cotton; tannery. Pop. (par.) 2,400.

Setu'bal, port, Estremadura, Portugal, 20 m. S.E. of Lisbon; important (3,601)

sardine fisheries; exports salt, wine, cork, oranges, grapes; manufactures lace and fish fertiliser. Pop. 37,000.

Sevast'opol, or SEBASTOPOL, port, seaside resort, Crimea, on Black Sea; before Great War was important naval station for Black Sea fleet; zoological marine station; has extensive dockyards, naval arsenals; manufactures tiles, leather, soap, machinery; famous for its siege (1854-55). Pop. 75,000.

Sevenoaks, mkt. tn., Kent, England, 20 m. S.E. of London; anc. church; grammar school. Pop. 10,500.

Sew'ern, river, England and Wales, rises on Plinlimmon, Montgomeryshire, and traverses Shropshire, Worcestershire, and Gloucestershire; forms estuary opening into Bristol Channel; chief tribs., Vyrnwy, Terme, Upper and Lower Avon, Teme, Wye, and Usk; connected with Rs. Thames and Trent by canal; navigable to Welshpool; railway tunnel (4½ m.) passes under estuary; noted for its eagle or bore. Length, 180 m.

Seville (*se-vil'*). (1) Prov., S. Spain; flat and fertile in N., hilly in W.; watered by Rs. Guadalquivir and Genil; agriculture, cattle rearing, mining; wool, silk, oranges, oil, cork, wine produced; copper, iron, coal, marble mined. Area, 5,428 sq. m.; pop. 746,000. (2) Cap. of above, on R. Guadalquivir; has many beautiful Moorish buildings, the finest of which is the Alcazar or palace; fine cathedral, largest in Spain; univ.; centre of sport of bull-fighting; exports lead, quicksilver, oranges, lemons, olives, olive oil, cork, wine; manufactures iron goods, machinery, pottery, silk, cotton, cigars. Pop. 217,000.

Sèvres (*sāvr*), tn., Seine-et-Oise, France, on R. Seine, 6 m. S.W. of Paris; noted for porcelain; painted glass, mosaic work. Pop. 14,000.

Seychelles (*sā-shel'*), British crown colony, comprising over 100 islands in the Indian Ocean, N. of Mauritius; volcanic, and surrounded by coral reefs; principal isl. Mahé; surface

generally mountainous; climate tropical but healthy; produces maize, manioc, coconuts, vanilla, cloves, fruit, rubber. Cap. Victoria. Area, 156 sq. m.; pop. 27,000.

Seyne-sur-Mer (*sân*), tn., Var, s. France, opposite Toulon; extensive shipbuilding yards; maritime workshops; oyster beds. Pop. 18,000.

Sfax, port, Tunisia, N. Africa, on Gulf of Qabes; manufactures textiles; exports fruits, sponges, oil, phosphates, esparto grass. Pop. 28,000.

Shabin Kara-Hissar. See **KARA-HISSAR SHARKI**.

Shaffesbury, mun. bor., Dorset, England, 18 m. s.s.w. of Salisbury; agricultural implements. Pop. 2,400.

Shahabad', dist., Patna div., Bengal, India; fertile plain in n.; densely wooded Kaimur Hills in s.; chief rivs., Ganges and Son; rice, wheat; oil-seeds, poppy, sugar, millet grown. Cap. Arrah, 36 m. w. of Patna. Area, 4,373 sq. m.; pop. 1,817,000.

Shahjahanpur', tn., United Provinces, India, on R. Deoha, 95 m. n.w. of Lucknow; manufactures sugar. Pop. 73,000.

Shamo'kin, town, Pennsylvania, U.S.A., 40 m. n.n.e. of Harrisburg; in anthracite coal region; iron and steel industries. Pop. 21,000.

Shanghai (*shang-hai*), tn., Kiangsu, China, near mouth of Yangtze Kiang; chief commercial city and greatest foreign market of China; central and walled parts of town consist of narrow and dirty streets; well-built suburbs outside the walls. Situated in midst of great plain, producing rice, cotton, and fruits. Shipbuilding and engineering extensively carried on; cotton, leather, paper, cigarettes, and many other articles are manufactured. Pop. 2,677,000.

Shanghai-kwan' ('gate between mountain and sea'), frontier tn., Hopeh prov., China; important strategic point at terminus of Great Wall, 3 m. from sea. Pop. 30,000.

Shank'lin, wat.-pl., E. Isle of Wight, England; chalybeate springs. Pop. 5,100.

Shan'oon, riv., I.F.S.; rises in co. Cavan; winds s. and s.w. through Loughs Allen, Boderg, Ree, and Derg to Limerick, then widens into estuary entering Atlantic Ocean; navigable to Lough Allen. A large power plant to supply electricity to the greater part of the I.F.S. is being constructed near Limerick. Length, 224 m.

Shansi, prov., N. China; mountainous; rich in coal, iron ore, salt, petroleum. Cap. Tai-yuan. Area, 81,940 sq. m.; pop. 12,153,000.

Shan States, in n. and e. of Burma, in R. Salween basin; two groups—Northern (six states) and Southern (thirty-five states). Mainly plateau; largely undeveloped. Total area, 56,313 sq. m.; pop. 1,433,000.

Shantung', maritime prov., China, bordering on Yellow Sea and Gulf of Pohai; w. is fertile plain traversed by the Grand Canal; mountainous in e.; R. Hwang-Ho flows s.w. to n.e. through prov.; extensive deposits of coal, iron, lead, copper, and gold; produces grain, fruit, indigo, silk. Cap. Tsinan. Area, 55,970 sq. m.; pop. 30,803,000.

Shap, urb. dist., Westmorland, England, 12 m. s.s.e. of Penrith. To south Shap Fell, a well-known granitic mt., and Shap Summit, the most important pass in the county, traversed by L.M.S. Rly. Pop. of urb. dist. 1,200.

Shari (*shâ'rî*), river, N. Central Africa; rises n. of equator and flows n.w. into Lake Chad; length, 1,400 m.

Sharle'ston, vil. and par., Yorks, England, 4 m. s.e. of Wakefield; brick making; large colliery. Pop. (par.) 2,800.

Sharon (*shâr'on*), tn., Pennsylvania, U.S.A., on border of Ohio, 50 m. s. of L. Erie; iron manufactures, bricks, electrical articles. Pop. 22,000.

Shas'i, port, Hupeh, China, on R. Yangtze; manufactures cotton cloth; exports seeds, vegetable tallow, wood oil. Pop. 190,000.

Shatt-al-Arab', riv. formed by jn. of Rs. Euphrates and Tigris, Iraq, Asia; extends from Qurna to Persian Gulf; enters sea by several mouths;

carries much silt. Chief ports, Basra, Mohammerah, and Fao. Length, 123 m.

Shawinigan Falls (*shā'in-i-gan*), falls and tn., Quebec, Canada, on St. Maurice R., 21 m. N. of Three Rivers; alt. of falls, 150 ft.; supply power for wood-pulp and paper mills. Pop. (tn.) 11,000.

Shawnee, city, Oklahoma, U.S.A., on North Canadian R., 40 m. S.E. of Oklahoma City; cotton manufactures; meat preserving; railway workshops. Pop. 15,000.

Sheboygan, city, Wisconsin, U.S.A., on Lake Michigan; furniture, leather goods, enamelled ware, pianos, gloves; mineral waters; exports coal; fisheries. Pop. 39,000.

Sheerness, fort, port, dockyard, naval arsenal, at junction of Rs. Medway and Thames, on Isle of Sheppey, Kent, England; dockyard extends to 60 ac.; industries chiefly connected with government works. Pop. 16,700.

Sheffield, co. bor., W. Riding, Yorks, England, on R. Don; chief seat of English cutlery trade, manufacturing every kind of cutting tool; other industries include steel manufacture and the production of armour-plates, guns, rails, bicycles, optical and mathematical instruments, britannia metal, and electro-plated goods, gramophones and needles; coal is mined in vicinity. Has fine public buildings and univ. Pop. 511,700.

Shenandoah. (1) City, Pennsylvania, U.S.A., 33 m. S.W. of Wilkes-Barre; coal-mining centre. Pop. 25,000. (2) Largest trib. of Potomac R., Virginia and W. Virginia, U.S.A.; valley fertile, with orchards and poultry farming. Valley was scene of much fighting in American Civil War. Length, 200 m.

Shendi, tn., Anglo-Egyptian Sudan, on R. Nile, between Khartoum and Berber; railway works; manufactures cotton and leather. Pop. 11,000.

Shengking. See LIAONING.

Shensi, inland prov., China; mountainous; watered by R. Wei, trib. of Hwang-Ho; coal, petroleum;

produces wheat, cotton. Cap. Sian. Area, 75,270 sq. m.; pop. 9,466,000.

Shepshed, urb. dist., Leicestershire, England, 4 m. W. of Loughborough; on edge of Charnwood Forest. Pop. 5,800.

Shepton-Mallet, mkt. tn., Somersetshire, England, 5 m. S.E. of Wells; breweries, roperies, pottery industries. Pop. 4,100.

Sherborne, mkt. tn., Dorsetshire, England, 5 m. E. of Yeovil; 12th cent. abbey church, grammar school; gloves. Pop. 6,500.

Sherbrooke, city, s. Quebec, Canada, on R. St. Francis, 80 m. E. of Montreal; woollens and worsteds, carpets, machinery, sawmills. Pop. 26,000.

Sheringham, urb. dist., N. Norfolk, England; seaside resort; seat of Norfolk crab-fishery. Pop. 4,100.

Sherman, city, Texas, U.S.A., 62 m. N. of Dallas; manufactures cotton-seed oil, flour, iron goods. Pop. 15,000.

's Hertogenbosch (French *Bois-le-Duc*), tn., cap. of N. Brabant, Holland, at junction of Rs. Aa and Dommel; manufactures cloth, hats, needles, cutlery; cathedral. Pop. 41,000.

Sherwood Forest, anc. royal forest, Notts, England, extending into Derby and Yorks; traditional retreat of Robin Hood; includes the district of the 'Dukeries.'

Shetland, or ZETLAND, group of nearly 100 islands lying N.N.E. of mainland of Scotland, constituting a county of Scotland; 27 islands are inhabited, of which largest are Mainland, Yell, and Unst; surface hilly, reaching extreme height of 1,475 ft. in Ronas Hill in Mainland; principal industry is fishing, esp. herring; sheep, cattle, and breed of small ponies reared; much of soil is peaty; oats, barley, potatoes, turnips cultivated; knitted woollen goods an important household industry. Chief tn., Lerwick. Area, 550 sq. m.; pop. 21,400.

Shetleston, tn., Lanarkshire, Scotland; now forming part of Glasgow; collieries. Pop. 14,000.

Shifnal, mkt. tn., Shropshire, England, 17 m. E. of Shrewsbury; iron-

works, coal and iron mines. Pop. 3,300.

Shigatse, tn., Tibet, Asia, on upper R. Brahmaputra or Tsang-po; important religious and trading centre. Pop. 9,000.

Shikarpur, tn., Sind, India, on railway to Quetta; great bazaar; important trading centre; trade in gems and silk. Pop. 36,000.

Shikoku (*shē-kō'koo*), isl., s. Japan; separated from Honshu and Kyushu by Inland Sea; mountainous; valleys fertile; forests; rice, fruits, sugarcane; copper. Area, 6,856 sq. m.; pop. c. 3,500,000.

Shildon, tn., Durham, England, 3 m. s.e. of Bishop Auckland; railway workshops, foundries, coal mines, quarries. Pop. 12,700.

Shillong, cap. of Assam, India, on R. Brahmaputra; health and holiday resort. Pop. 17,000.

Shimonoseki, port, Honshu, Japan, on w. entrance of Inland Sea; peace treaty between China and Japan signed here (1895); open to foreign trade since 1890. Pop. 92,000.

Shipley, par. and tn., W. Riding, Yorks, England, on R. Aire, 3 m. s.w. of Bradford; manufactures worsted. Pop. 30,200.

Shiraz, cap., Fars prov., s. Persia; fine mosques and good bazaars; manufactures mosaics, silks, carpets, wine; exports gums, opium, rose water, cotton, skins. Pop. 35,000.

Shiré (*shē'ra*), riv., Africa; issues from s.e. corner of Lake Nyasa, and joins R. Zambezi; navigable to Chilomo, and for smaller vessels as far as Katunga. Length, 370 m.

Shirley, former urb. dist., now included in Southampton. Pop. 17,400.

Shoa, div., formerly kingdom, Abyssinia; agriculture, oranges; in 1889 Menelik II., King of Shoa, became King of Abyssinia. Chief tn., Addis Ababa, cap. of Abyssinia. Area, c. 26,000 sq. m.; pop. 1,500,000.

Shoeburyness, tn., Essex, England; opposite Sheerness; garrison town, with school of gunnery and Royal Artillery works. Pop. 6,700.

Sholapur, tn., Bombay, India, 147 m. s.e. of Poona; important trading centre; manufactures silk and cotton cloth. Pop. 120,000.

Shoreditch, e. metropolitan bor., London, England; furniture, cabinet-making, boots and shoes. Pop. 97,000.

Shoreham by Sea, urb. dist. and port, Sussex, England, at mouth of R. Adur; fine church; shipbuilding, fisheries; seaside resort. Pop. 8,800.

Shorncliffe Camp, military station, Kent, England, 1½ m. w. of Folkestone; camp dates from Peninsular and Crimean Wars.

Short Heath, tn., Staffs, England, 4½ m. n.e. of Wolverhampton; coal mining. Pop. 5,000.

Shotts, par. and vill., Lanarkshire, Scotland, 18 m. s.e. of Glasgow; coal and ironstone mining; quarrying. Pop. (par.) 21,000.

Shreveport, city, Louisiana, U.S.A., on Red R.; railway centre; petroleum refineries. Pop. 77,000.

Shrewsbury, co. tn., Shropshire, England, on R. Severn. Remains of city walls and Norman castle; famous school founded by Edward VI.; great road and rail centre; glass staining and ironfounding; brewing, tanning; agricultural implements, linen yarns. Pop. 32,400.

Shropshire, or SALOP, co. of w. England, near centre of Welsh border; mountainous in s. and w.; crossed by Cleve Hills, Caradoc Hills, and other ranges; drained by R. Severn and tribs. Agriculture is principal industry; sheep and cattle are reared. Several small coalfields, of which Coalbrookdale is most important; other minerals found include iron, lead, limestone, and small quantities of zinc and barytes; blast furnaces, iron manufactures. Cap. Shrewsbury. Area, 1,346 sq. m.; pop. 244,200.

Shumen, tn., Bulgaria, 56 m. w. of Varna; military centre; slippers, clothing, copper and tin ware. Pop. 25,000.

Shushtar, tn., Persia, on R. Karun, 116 m. n.e. of Mohammerah; carpets,

woollens, earthenware, saddles; brass and copper work. Pop. 20,000.

Shuya (*shoo'yā*), tn., central Russia, 63 m. n.w. of Vladimir; cotton, linen, soap, and pottery; hides and furs. Pop. 20,000.

Shwebo'. (1) Dist., Burma; mainly plain, surrounded by hills, watered by R. Mu; rice, maize, cotton, and peas. Area, 5,714 sq. m.; pop. 391,000. (2) Cap. of above, 53 m. n.e. of Mandalay; in centre of rice-growing region. Pop. 11,000.

Sialkot'. (1) Dist., n. Punjab, India; very fertile; cereals, sugar. Area, 1,796 sq. m.; pop. 1,090,000. (2) Cap. of above, near Kashmir boundary n. of Lahore; garrison town; tents, surgical instruments, boots, cotton, and paper. Pop. 71,000.

Siam, kingdom, Indo-China; lies mainly in centre of Indo-China peninsula, with Burma on n. and w., and French Indo-China on e. It has a long strip running down n. half of Malay Peninsula between Strait of Malacca and Gulf of Siam, with Malay States to the s. The w. half of main portion consists of valley of R. Menam and e. half of Korat plateau, which stretches to R. Mekong basin. N. is mountainous, rising to heights of 6,000 to 8,000 ft.; s. is an alluvial plain, drained by rivers mentioned and their tribs., chief of which is R. Meping, joining R. Menam. Bangkok is the capital. Climate is of the monsoon type, wet season lasting from May till October. Chief wealth is rice in s., teak and other timber trees in n. Forestry is almost entirely in British hands; labourers of s. largely Chinese coolies. Rice is chief export; other exports include teak, hides, pepper, silk. Mineral resources are widespread and various, including coal, tin, iron, zinc, wolfram, tungsten, antimony, and manganese. Railways connect with Federated Malay States lines. Cap. Bangkok. Area, 200,148 sq. m.; pop. 9,207,000.

Sian', formerly HSI-AN or SINGAN, city, cap. of Shensi, China, at junction

of important trade routes; great trading centre in silk, tea, cotton, sugar, paper, porcelain, skins. Pop. 1,000,000.

Siangtan', formerly HSIANG-TAN, tn., Hunan, China, on Siang trib. of Yangtse Kiang, 25 m. s. of Chang-sha; general trade and transshipment of goods. Pop. 300,000.

Sibenik, or SEBENICO (*shib-en'ik*), port, Dalmatia, Yugoslavia, on Adriatic Sea, 30 m. n.w. of Split; cathedral; naval base; fishing; weaving, oil refining; woollens, chemicals; exports bauxite. Pop. 20,000.

Siberia (*si-bē're-a*), terr., n. Asia, between Ural Mts. and Pacific Ocean, and between Arctic Ocean and Kazak, Mongolia, Manchuria, and Korea. The name, which was the former designation of Russian territory in Asia, now includes Ural Area, Siberian Area, Yakutsk Rep., Buriat Mongol Rep., and Far Eastern Area. See separate articles.

Siberian Area, one of administrative units of U.S.S.R., Asia; n. is Arctic Ocean; e. are Yakutsk Rep. and Buriat Mongol Rep.; s. are Mongolia and Kazak; w. is Ural Area. Mountainous and hilly in s. and e., plain in w., large portion of it being the basin of R. Yenisei. Crossed by Trans-Siberian Rly. Chief crops, wheat, rye, barley, potatoes, grown in vicinity of rly. Farther n. is forest, succeeded by tundra. Horses and cattle bred; reindeer important. Rich mineral deposits, esp. gold, silver, asbestos, magnetic iron ore. Chief tns., Novo-Sibirsk (cap.), Omsk, Tomsk, Irkutsk. Area, 1,611,446 sq. m.; pop. 8,668,000.

Sibiu, formerly HERMANNSTADT, tn., Transylvania, Romania, on R. Sibiu; linen, leather, ropes, soap; brewing and distilling. Pop. 33,000.

Sibonga, tn., Sebu I., Philippine Is., on e. coast; maize and tobacco are chief products. Pop. 27,000.

Sibsagar, dist., n.e. Assam, India; plain, with much jungle; watered by tribs. of R. Brahmaputra; produces large quantities of tea. Chief tn., Sibsagar. Area, 5,202 sq. m.; pop. 823,000.

Sicily (*sis'i-lî*), isl., Italy; largest in Mediterranean, about 2 m. from s.w. extremity of Italian mainland, from which it is separated by the deep, narrow Strait of Messina; 80 m. from African coast; 180 m. long, 120 wide; triangular in shape. Surface is mountainous; most of island over 500 ft. above sea-level; highest point, Etna, a volcano (11,870 ft.). Good harbours on N. but not on S. coast. Rivs. unimportant. Summer hot and dry, winter mild and rainy. Sicily suffers from earthquakes, eruptions, sirocco in summer; malaria in parts. Chief crop wheat; fruit trees and olives, especially on N. and E. coasts, vines mainly in W.; soil fertile, but agricultural methods backward; trees scarce; principal exports, citrus fruits, almonds, nuts, wine (Marsala), preserved vegetables, sulphur, salt, silk, tunny, and sardines, sumach (for tanning). Deep-sea fisheries are valuable. Cap. Palermo. Area, 9,935 sq. m.; pop. 4,426,000.

Sid'cup, urb. dist., Kent, England, 12 m. S.E. of London; residential centre; part of Greater London. Pop. 12,400.

Sidi-bel-Abbès (*sê-dê'bel-ab-âs'*), tn., Oran, Algeria, N. Africa, on R. Mekerra; exports grain, tobacco, cattle; one of headquarters of French Foreign Legion. Pop. 43,000.

Sid'mouth, fashionable wat.-pl., s. Devon, England, on R. Sid and Lyme Bay, surrounded by high cliffs; encroachment of sea has destroyed harbour. Pop. 6,100.

Sî'don, modern SAIDA, anc. seapt., Great Lebanon, Syria, 20 m. S. of Beirut; exports olive oil, lemons, oranges. Pop. 10,000.

Siedlce (*syedl'tse*), tn., Poland, 53 m. E. of Warsaw; famous castle; scene of massacres of Jews and others (1906). Pop. 31,000.

Siegburg (*zêg'boorg*), tn., Rhineland, Prussia, on R. Sieg, 15 m. S.E. of Cologne; manufactures fireworks, earthenware. Pop. 19,000.

Siegen (*zê'gen*), tn., Westphalia, Germany, on R. Sieg, 47 m. E. of

Cologne; manufactures iron, leather, machinery. Pop. 31,000.

Siens (*sê-a'na*). (1) Prov., N. Italy; wheat, wine, olives, silk. Area, 1,471 sq. m.; pop. 255,000. (2) Cap. of above, 31 m. S. of Florence; mediæval tn., with old walls and gateways, narrow steep streets, splendid churches and palaces; magnificent Gothic cathedral of black and white marble; univ.; ranks next to Florence, Rome, and Venice in the history of art. Chief industries are machinery, ironwork, wood carving, marzipan. Pop. 48,000.

Siero (*sê-â'ro*), tn., N. Spain, on R. Nora, 9 m. E. of Oviedo; tanneries, saline springs. Pop. 27,000.

Sierra Leone (*sê-er'a lê-ô'nâ*), British colony with inland protectorate, W. Africa, between Liberia and French Guinea, with Atlantic Ocean on W.; low and swampy near shore, N. part rises in Mt. Daro to 4,396 ft. Chief exports: palm kernels, palm oil, kola nuts, ginger, piasava, hides. Gold discovered recently. Chief tn., Freetown. Area (colony), c. 4,000 sq. m.; (protectorate), 27,000 sq. m. Pop. (colony), 85,000; (protectorate), 1,456,000.

Sierra Nevada (*sê-er'a nâ-vâ'dâ*) ('snowy mountains'). (1) Highest mt. range, Spain, between valley of R. Guadalquivir and Mediterranean; highest peak, Mulhacén (11,421 ft.). (2) Mt. range, California, U.S.A.; highest summit, Mt. Whitney (14,500 ft.). In S. occur groves of giant redwoods.

Sî Kiang', most important river, S. China; rises in Yunnan plateau, enters China Sea by great delta, on branch of which stands Canton; navigable to Wuchow. Length, over 1,250 m.

Sik'kim, Indian state, Himalayas, India; situated between Nepal and Bhutan; mountainous; watered by R. Tista, affluent of R. Brahmaputra; produces maize, rice, fruit; woollens; much of country is forested. Cap. Gangtok. Area, 2,818 sq. m.; pop. 82,000.

Silchester, vil., Hants, England, 7 m. n. of Basingstoke; site of Roman tn. (*Calleva Atrebatum*), whence five Roman roads radiated. Pop. 390.

Silesia (si-lē'she-a). (1) Prov., Czechoslovakia, between Moravia and Prussian Silesia; has Sudetic Mts. in n., spurs of Carpathians in e.; drained by upper waters of R. Oder and Vistula; in n.w. sheep are reared, and forestry and dairy farming are important; in s.e. poultry, cereals, and fruit are produced; has valuable coalfield. Area, 1,708 sq. m.; pop. 720,000. (2) Prov., s.e. Prussia, divided into Upper and Lower Silesia; hilly in s., where Sudetic Mts. reach extreme height of 5,260 ft.; elsewhere surface is flat; drained by R. Oder; large area forested; Upper and Lower Silesia have each a coalfield, that in Upper being larger and more valuable; produces also zinc, iron, silver-lead, arsenic; agriculture is carried on, and sugar-beet, cereals, fruits, and oil plants are cultivated; manufactures linens, cottons, woollens, zinc and iron goods, paper. Chief tn., Breslau. Area, 14,022 sq. m.; pop. 4,512,000.

Silistra, formerly **SILISTRIA**, tn., Romania, on R. Danube, 72 m. n.w. of Varna; important trade centre; cloth manufactures, distilleries and sawmills; tobacco and grapes grown in vicinity. Pop. 18,000.

Sil'loth, tn., Cumberland, England, on Solway Firth; wat. pl.; steam communication with Isle of Man and Dublin; coal and grain exported. Pop. 3,500.

Silsden, urb. dist., W. Riding, Yorks, England, 4 m. n.w. of Keighley; manufactures worsted and nails. Pop. 4,900.

Simbirsk. See **ULIANOV**.

Simferopol, tn., Crimea, U.S.S.R., 30 m. n.e. of Sevastopol; manufactures soap, candles, tobacco; noted for fruit and vineyards. Pop. 88,000.

Sim'la, tn., e. Punjab, India, on spur of the Himalayas; seat of Indian Government during hot season. Pop. (winter) 27,000.

Simon's Town, naval station, on

False Bay, Cape Prov., S. Africa, 22 m. s. of Cape Town; residential and educational centre; large docks. Pop. 5,000.

Simplon Pass (san-plon'), mt. pass (6,590 ft.) between Switzerland and N. Italy, traversed by a fine carriage road. Double railway tunnel under pass (12½ m. long).

Sinai (si'nai), triangular peninsula, Egypt, between Gulf of Suez and Gulf of Aqaba; mountains in s., rest desert; length, 230 m.; breadth, 150 m.; practically waterless and barren. Pop. 15,000.

Sinaloa, state, Mexico, bordering Gulf of California; narrow coastal plain rising to Sierra Madre Mts. in e.; cereals, sugar, coffee, tobacco, and fruit are grown; mining of silver, iron, and copper is important. Cap. Culiacan. Area, 27,557 sq. m.; pop. 341,000.

Sind, prov., Bombay, India; bounded on n. by Baluchistan and Punjab, on s. by Indian Ocean, on e. by Rajputana, on w. by Baluchistan. Chief riv. Indus; land near it is fertile and watered by irrigation. Climate very dry and hot. Chief occupation, agriculture; wheat, rice, sugar, tobacco, indigo, hemp, cotton grown. Chief tns., Karachi and Hyderabad. Area, 46,506 sq. m.; pop. 3,279,000.

Singan. See **SIAN**.

Singapore. (1) Isl., Straits Settlements, s.e. Asia; s. of Malay Peninsula, to which it is joined by a causeway; surface generally rolling and forested. Area, 206 sq. m.; pop. 426,000. (2) Tn., in s.e. of above isl., cap. of Straits Settlements; seat of government and contains governor's palace, cathedrals, and Raffles Museum; free port; chief commercial emporium of s.e. Asia; coaling station; naval base being constructed; shipbuilding, engineering works; busy manufacturing town producing biscuits, shoes, rubber, leather, and tinned fruit. Pop. 350,000.

Sinkiang ('new territory'), prov., w. China; extends from w. Mongolia to w. Tibet. Much of surface occu-

pied by Takla Makan Desert in s., to n. of which flows R. Tarim, ending in Lob Nor Lake. Towards s. are Altyn-Tagh Mts.; in n. Tien Shan Mts. There are three passes to w. and two into India, trade with India being chiefly by way of Karakoram Pass. Climate has great extremes of heat and cold. Cereals, fruits, vegetables, cotton, wool, silk, are produced and exported; jade and gold are worked. Cap. Urumsit. Area, 550,340 sq. m.; pop. 2,688,000.

Sinope (*sê-nô'pê*), port, Asia Minor, on Black Sea; anc. tn.; good harbour. Pop. 32,000.

Sion (*sê-on*), cap. of Valais, Switzerland, on R. Rhone; ruined castles; cathedral. Pop. 7,000.

Sioux City (*soo*), city, Iowa, U.S.A., on R. Missouri; meat-packing, foundries, potteries; electrical supplies, cement, soap. Pop. 79,000.

Sioux Falls (*soo*), city, S. Dakota, U.S.A., on R. Missouri at junction of Big Sioux R.; manufactures machinery, carriages, and agricultural implements. Pop. 33,000.

Siquijor (*sê-kê-hor*), isl., Philippines, 20 m. s. of Sebu; produces tobacco, rice, maize, and coconuts. Area, 126 sq. m.; pop. 46,000.

Sir Dar'ya, formerly JAKARTES, river, Central Asia; rises in Tien Shan Mts., flows w. and n.w. through desert region, and enters Sea of Aral by three channels; has numerous tribes. Length, 1,500 m.

Siret (*sê-ret*), formerly SERETH, riv., Romania; rises in Carpathian Mts. s.w. of Cernauti, and flows s.e. through Moldavia into R. Danube above Galatz. Length, c. 300 m.

Sistova. See SVISHTOV.

Sitapur, tn., United Provinces, India, 52 m. n. of Lucknow; commercial centre; exports grain; military cantonment. Pop. 22,000.

Sithney, par. and vil., Cornwall, England, 10 m. e. of Penzance; anc. earthworks and cromlech. Pop. (par.) 2,500.

Sit'ka, formerly NEW ARCHANGEL, tn., Baranov I., Alaska; U.S. naval

coaling station; has magnetic observatory; salmon canning industry; lumbering, mining. Pop. 1,200.

Sit'ingbourne and Milton, tn., Kent, England, 9 m. e. by s. of Chatham; centre of large fruit and hops dist.; manufactures cement, bricks, and paper; oyster fishing. Pop. 20,200.

Sivas (*sê-uas*). (1) Vilayet, n. Asiatic Turkey; wheat, barley grown on plateau, vines in lower districts; silver, lead, copper, iron, lignite, salt abundant. Area, 23,970 sq. m.; pop. 330,000. (2) Cap. of above, 170 m. s.w. of Trebizond; coarse woollen goods. Pop. 30,000.

Siv'ri-hissar ('pointed castle'), tn., Asia Minor, 82 m. s.w. of Angora; trade in opium and mohair. Pop. 31,000.

Siwa (*sê-wâ*), oasis, Libyan Desert, Egypt, 350 m. w. of Cairo; very fertile, and produces dates. Remains of Temple of Ammon. Area, 23 sq. m.; pop. 4,000.

Skag'errak, strait between Jutland and s. Norway; communicates with Baltic Sea by Kattegat; length, 150 m.; breadth, 70 to 90 m.

Skeg'ness, tn., bathing resort, Lincolnshire, England, with fine sands. Pop. 9,100.

Skel'manthorpe, urb. dist., W. Riding, Yorks, England, 7 m. e.s.e. of Huddersfield; fancy woollen goods. Pop. 3,700.

Skel'mersdale, tn., Lancs, England, 7 m. w. of Wigan; coal mining, brick making. Pop. 6,200.

Skel'morlie, vil., Ayrshire, Scotland, on the Firth of Clyde, 8 m. s.w. of Greenock; fashionable summer resort; castle in vicinity. Pop. 1,900.

Skel'ton and Brot'ton, urb. dist., Yorks, England, 10 m. e. by s. of Middlesbrough; extensive iron mines. Pop. 13,700.

Sker'ries, port and wat.-pl., co. Dublin, I.F.S., 18 m. n. of Dublin; muslin embroidery is manufactured; fishing port; four small islands, the Skerries, lie off the coast; pop. 1,800.

Skibbereen, mkt. tn. and port, co. Cork, I.F.S., 12 m. s.e. of Bantry;

trade in agricultural produce; fishing. Pop. 2,600.

Skid'daw, mt., Cumberland, England, 3 m. N. of Keswick; alt. 3,054 ft.

Skien (*shên*), tn., Norway, on R. Skien, 60 m. S.W. of Oslo; timber, cotton, and paper factories. Pop. 17,000.

Skjerniewice (*skyer-nê-â-wêł'sâ*), tn., Poland, 42 m. S.W. of Warsaw; manufactures cloth and linen; contains celebrated palace. Pop. 14,000.

Skip'ton, tn., W. Riding, Yorks, England, 18 m. S.W. of Bradford; woollen, spinning, and sewing-cotton factories. Pop. 12,400.

Skoplje (*skop'lyâ*), formerly Uskub, tn., Serbia, Yugoslavia, on R. Vardar; important rly. jn.; has tanning, soap, metal, flour, wine, and sugar industries; centre of silver filigree work. Pop. 72,000.

Skye, largest isl. of Inner Hebrides, Inverness-shire, Scotland; bleakmoor and rugged mts. (Coolin Hills, 3,234 ft.); deeply indented coasts; fishing, sheep farming, and distilling. Cap. Portree. Area, 670 sq. m.; pop. 11,000.

Slath'waite, urb. dist. and mkt. tn., W. Riding, Yorks, England, on R. Colne, 4 m. S.W. of Huddersfield; cottons and woollens; mineral baths attract summer visitors. Pop. 5,200.

Slavonia. See CROATIA-SLAVONIA.

Slea'ford, tn., Lincolnshire, England, on R. Slea, 17 m. S. of Lincoln; brewing and trade in agricultural produce. Pop. 7,000.

Sles'vig, most S. part of Denmark, extending to Flensburg Fjord; plain in E. includes Alsén I.; fertile marshes in W. with off-lying Röm I.; ceded to Denmark by Germany after Great War; forms S. Jutland Provs. Area, 1,502 sq. m.; pop. 176,500.

Sles'ska Os'trava, tn., Silesia, Czechoslovakia, near Prussian Silesia; on important coalfield; coal mining. Pop. 23,000.

Sl'igo. (1) Maritime co., Connaught, I.F.S., bordering on Atlantic Ocean; surface diversified, well-wooded hills being interspersed with

lakes, bogs, and fertile tracts; occupation chiefly pastoral; sea and salmon fishing important. Area, 694 sq. m.; pop. 71,400. (2) Cap. of above, on Sligo Bay; cathedral; exports cattle and agricultural produce; centre of extensive fisheries; flour and saw mills. Pop. 11,400.

Sliv'en, tn., Bulgaria, 70 m. N. by W. of Adrianople; government factory for military clothing; mulberry orchards; black wine. Pop. 29,000.

Slon'im, tn., Poland, 75 m. S.E. of Grodno; distilleries, tanneries, brickfields; factories for woollen and linen cloth. Pop. 25,000.

Slough (*slou*), mkt. tn., Bucks, England, 2 m. N.E. of Windsor; engineering; seed-testing grounds. Pop. 33,600.

Slovak'ia, prov., Czechoslovakia, between Moravia and Ruthenia; chiefly mountainous, with small plains in E. and W.; forestry and sheep rearing; iron, antimony, manganese, and silver are mined; weaving and wood carving are home crafts; in lowlands cereals, tobacco, and sugar-beet are grown. Cap. Bratislava. Area, 18,895 sq. m.; pop. 3,001,000.

Slove'nia, prov., N.W. Yugoslavia; mainly mountainous; dairying and stock raising largely carried on; vines, walnuts, chestnuts, and fruit in valleys; extensive forests. Chief tn., Ljubljana. Area, 6,253 sq. m.; pop. 1,056,000.

Sluys (*slou'is*) (French *Ecluse* = 'sluice'), tn., Zeeland, Holland, 10 m. N.E. of Bruges; scene of Eng. naval victory over French (1340); former roadstead silted up, and town now 2 m. from the sea.

Smed'erevo, formerly SEMENDRIA, tn., Yugoslavia, on R. Danube, 20 m. S.E. of Belgrade; manufactures railway wagons; exports grain, live-stock, wine, oils. Pop. 6,000.

Smethwick (*smeth'ik*), co. bor., Staffs, England, 3 m. N.W. of Birmingham; manufactures chemicals, glass, machinery, and lighthouse fittings; iron foundries, engineering works. Pop. 84,400.

Smithfield, dist., London, N. of St. Paul's; from 12th cent. a famous cattle market; scene of fairs; in Tudor period heretics burned here; now contains Central Meat Market of London.

Smith's Falls, tn., Ontario, Canada, 50 m. N.E. of Kingston. Pop. 7,100.

Smolensk'. (1) Prov., Russia, s.w. of Moscow; hilly, or undulating plains; forest-clad; numerous lakes; principal river is the Dnieper; chief occupation, agriculture; live-stock reared; minerals are coal, phosphorite, iron. Area, 22,880 sq. m.; pop. 2,258,000. (2) Cap. of above, on R. Dnieper; important rly. jn.; manufactures soap, tallow, linen, leather; iron and copper smelting. Pop. 79,000.

Smyrna (*smir'na*) (Turkish *Izmir*), chief port, Asia Minor, at head of Gulf of Smyrna, on arm of Aegean Sea; has Turkish and European quarters; important depot for Turkey carpets; machine shops, foundries, flour mills; olive oil, perfumery, pottery; exports raisins, figs, tobacco, silk, and carpets. Occupied by Greece after Great War; recaptured by Turkey (1922), with great destruction of life and property. Pop. 154,000.

Snae Fell, highest mt. in Isle of Man; alt. 2,034 ft.; electric tramway to summit.

Sneek (*snäk*), tn., Friesland, Holland; important horse fair; butter and cheese market. Pop. 15,000.

Snodland, par. and vil., Kent, England, on R. Medway; lime working, paper manufactured. Pop. (par.) 4,500.

Snowdon, mt. range containing five distinct peaks, Carnarvonshire, Wales; loftiest mountain in Wales (3,560 ft.); other peaks in range are Carnedd Dafydd, Carnedd Llewelyn, and Moel Siabod; railway from Llanberis to summit of Snowdon.

So'bat, riv., N.E. Africa; rises in Abyssinian highlands, flows W.N.W.; joins White Nile, and gives it its milky colour. Length, 450 m.

Society Islands, archipelago of eleven islands in Polynesia, S. Pacific; belong to France; volcanic and fertile; coconuts, copra, oranges, phosphates. Tahiti is largest isl.; its chief tn., Papeete, is cap. of group. Total area, c. 700 sq. m.; pop. c. 15,000.

Socotra, Brit. isl., Indian Ocean, 150 m. off Cape Gardafui, E. Africa; surface mountainous, reaching height of over 4,500 ft.; soil fertile; large numbers of cattle, sheep, and goats raised; fishing; dates, gums, and aloes produced; butter exported. Area, 1,382 sq. m.; pop. c. 12,000.

Söderhamn, port, on Gulf of Bothnia, Sweden; exports timber, wood pulp, iron; manufactures cellulose. Pop. 12,000.

Södertälje (*soo-der-tel'yä*), tn., Sweden, on Lake Malar; engineering, jute, and matches; holiday resort. Pop. 15,000.

Soest (*söst*), tn., Westphalia, Prussia, 26 m. E. of Dortmund; machinery, soap, hats, cigars, sugar, bricks; formerly important member of Hanseatic League. Pop. 21,000.

Sofia (*sö-fē'a*), cap. of Bulgaria; has cathedral and several mosques; univ.; manufactures beer, flour, leather, sugar, silk, tobacco; exports hides, maize, linen, silk. Pop. 213,000.

Sogne Fjord (*son'yä*), longest fjord in Norway; on W. coast; 136 m. long; 2½ to 4½ m. broad; over 4,000 ft. deep; surrounded by steep rocky cliffs.

So'ham, tn., Cambridgeshire, England, 5 m. S.E. of Ely; fruit growing and market gardening. Pop. 4,700.

Soignies (*swän-yē*), tn., Hainaut, Belgium; granite quarries, flax spinning and bleaching. Pop. 11,000.

Soissons (*swä-son'*), tn., Aisne, France, on R. Aisne, 65 m. N.E. of Paris; manufactures iron and copper goods, agricultural machinery, glass, sugar, and rubber goods. Pop. 16,000.

Soko of Peterborough. See PETERBOROUGH (3).

Soko'to, inland dist. of N. Nigeria, W. Africa; in R. Niger basin and drained by R. Sokoto; elevated plain; cotton culture increasing; dates, bananas, yams, onions; cattle rearing. Area, 38,860 sq. m.; pop. 1,667,000.

Solent', THE, strait, separating W. Isle of Wight from Hampshire, England, and extending between the Needles and Cowes; favourite yachting stretch; length, 17 m.; greatest breadth, 5 m.

Solismes (*so-lám'*), town, Nord, France, on R. Selle, 10 m. E. of Cambrai; textiles, sugar. Pop. 6,200.

Soleure. See **SOLOTHURN**.

Solithull', mkt. tn., Warwickshire, England, 6½ m. S.E. of Birmingham, of which it is a residential suburb; cattle fairs. Pop. 11,600.

Sö'lingen, tn., Rhineland, Prussia, 13 m. S.E. of Düsseldorf; cutlery and sword blades. Pop. 52,000.

Solola', tn., Guatemala, Central America, on Lake Atitlan; cloth, cigars, soap, pottery. Pop. 17,000.

Solomon Islands, group, W. Pacific, 500 m. E. of New Guinea; partly Brit., and partly administered by Australia under mandate; mountainous and volcanic; heavy rainfall; bananas, coconuts, sweet potatoes; exports are copra, ivory, turtle-shell, pearl-shell, sandalwood, nuts. Area, 11,000 sq. m.; pop. c. 150,000.

Solothurn (*só'ló-toorn*) (Fr. *Soleure*). (1) Canton, N.W. Switzerland; traversed by Jura Mts. and R. Aar; agricultural, pastoral, and industrial. German is principal language. Area, 305 sq. m.; pop. 141,600. (2) Cap. of above, on R. Aar; rly. jn.; watches, jewellery, shoes, cottons; motor industries. Pop. 13,750.

Sol'way Firth, inlet of Irish Sea, separating Cumberland, England, from Kirkcudbright and Dumfries, Scotland; length, c. 40 m.; valuable salmon fisheries; notorious for rapid tides.

Somal'land, part of E. Africa, jutting into Ind. Ocean. Country is undulating plateau with much desert.

Chief rivs. (both in Italian Somaliland) are Webi Shebelli, which flows S.E. from Abyssinia, turns S.W., and disappears in the sand, and R. Juba, the only riv. to reach the ocean. Political divisions are French, British, and Italian Somaliland.

French Somaliland, or **Somali Coast**, lies between Eritrea and British Somaliland; has salt mines and coastal fisheries; large inland trade, especially by railway from Jibuti to Addis Ababa; chief exports: coffee, ivory, hides, and skins. Chief tns., Jibuti (cap.) and Obok. Area, 5,790 sq. m.; pop. 86,000.

British Somaliland, or **Somaliland Protectorate**, s. of Gulf of Aden, lies between French and Italian Somaliland. Gums, ghee, cattle, sheep, hides, and skins are exported. Transport is by camels. Cap. Berbera. Area, 68,000 sq. m.; pop. c. 345,000.

Italian Somaliland lies between British Somaliland, Abyssinia, Kenya, and Indian Ocean. Cattle, sheep, and camels are raised. Oil, gum, hides, butter, cotton, and ivory are exported. Chief tn., Mogadishu. Area, c. 190,000 sq. m.; pop. c. 1,200,000.

Som'bor, tn., Voivodina, Yugoslavia, 94 m. N.W. of Belgrade; trading centre for corn and cattle. Pop. 33,000.

Som'ersetshire, maritime co., S.W. England; bounded N. by Bristol Channel and Gloucestershire, E. by Wilts, S. by Dorset, W. by Devon. Surface is varied; crossed by ranges of hills, including the Mendip, Polden, Quantock, and Brendon Hills; drained by Rs. Bristol, Avon, Frome, Yeo, Parret, and other streams; fine orchards; noted for cider and Cheddar cheese; agriculture is carried on and live-stock raised; chief minerals are coal, iron, and freestone; manufactures include silks and woollens, lace, gloves, pottery, beer, bath-bricks, and basket chairs. Thermal springs at Bath; valuable fisheries in Bristol Channel. Co. tn., Taunton. Area, 1,590 sq. m.; pop. 475,100.

Som'erville, city, Massachusetts,

U.S.A., on R. Mystic, adjoining Boston; meat-packing establishments; boots, shoes, and copper tubes. Pop. 104,000.

Somme (*som*). (1) Riv., France; rises in Aisne dep. and flows into English Channel; partly canalized. Scene of intense fighting during Great War; length, 140 m. (2) Dep., France; traversed by R. Somme; surface slightly undulating, fertile and well cultivated, yielding cereals, sugarbeets; textile industries and sugar refining. Cap. Amiens. Area, 2,443 sq. m.; pop. 474,000.

Sommerfeld, tn., Brandenburg, Prussia, 44 m. S.E. of Frankfurt-on-Oder; manufactures cloth and machine-shop goods. Pop. 11,900.

Sonderborg, port, seaside resort, on isl. of Alsens, Sleswig, Denmark; connected with mainland by pontoon bridge. Pop. 10,000.

Sondershausen (*son-ders-hou'zen*), tn., Thuringia, Germany, 35 m. N.W. of Weimar; manufactures woollens and bricks; salt mining. Pop. 10,000.

Song-Do. See KAIKENG.

Sonneberg, tn., Thuringia, Germany, 10 m. N.E. of Coburg; manufactures toys. Pop. 10,000.

Sonora, state, N.W. Mexico; mountainous in E.; valleys very fertile under irrigation; silver-mining and stock-raising industries; some grain, tobacco, cotton, and sugar-cane produced. Cap. Hermosillo. Area, 76,633 sq. m.; pop. 275,000.

Sonsonate (*son-so-nā'tā*), tn., Salvador, Central America; agricultural centre; manufactures cotton cloth. Pop. 17,000.

Soo. See SAULT STE. MARIE.

Soochow, city, Kiangsu, China, on Grand Canal, 35 m. W.N.W. of Shanghai; one of wealthiest towns in China; great silk centre; cotton mills, and trade in rice. Pop. 350,000.

Sopron, formerly ODENBURG, tn., Hungary, on Austrian frontier, commands important trade-route from Vienna; manufactures sugar, preserved fruit, agricultural implements; trade in cattle. Pop. 35,000.

So'ra, city, Campania, Italy, 60 m. S.E. of Rome; cathedral; manufactures paper and cloth. Pop. 18,000.

Sorau (*so'rou*), tn., Brandenburg, Prussia, on R. Sorebach, 54 m. S.E. of Frankfurt-on-Oder; manufactures of textiles, machinery, starch, glass, pottery. Pop. 18,000.

Sorel, tn., Quebec, Canada, at junction of Rs. Richelieu and St. Lawrence; foundries, engineering works, and sawmills. Pop. 8,000.

Soria, prov., Spain; bleak hill land drained by upper waters of R. Douro; much forest, and large tracts of pasture land. Cap. Soria. Area, 3,983 sq. m.; pop. 156,000.

Sorn, par. and vil., Ayrshire, Scotland, on R. Ayr; hematite found. Pop. (par.) 3,500.

Soro'ki, tn., Bessarabia, Romania, on R. Dniester; on Russian frontier; vineyards, tobacco; an important river port. Pop. 27,000.

Sorren'to, tn. and wat.-pl. on Bay of Naples, Italy; wood-inlaying industry; strawplait, lace; centre of wine region. Pop. 7,000.

Sosnowiec (*sos-nov'yets*), tn., Poland, 45 m. N.W. of Cracow; great centre of industry; coal mining, iron foundries, and textile mills. Pop. 86,000.

Soufrière (*soo-fre-är*), volcano, St. Vincent, Brit. W. Indies; during eruption (1902) two villages, with c. 1,500 inhabitants, were destroyed.

Sound, THE, strait between Sweden and Zealand I., connecting Kattegat with Baltic Sea; length, 70 m.

Sousse, formerly SUSA, tn. and port, Tunisia, N. Africa; oil mills; exports phosphates; esparto grass. Pop. 21,000.

South Africa, general name for area S. of Zambezi R., Africa; comprises Union of S. Africa, S. Rhodesia, Bechuanaland, S.W. Africa Protectorate, Basutoland and Swaziland, all Brit. possessions or under Brit. control; and some 150,000 sq. m. of Mozambique (Port. E. Africa), with a pop. of less than 3,000,000. For further information see separate articles.

South Africa, THE UNION OF, Brit. Dominion, Africa; bounded n. by Portuguese W. Africa and N. and S. Rhodesia, on n.e. by Portuguese E. Africa, and elsewhere surrounded by Indian and Atlantic Oceans; coastline regular, few natural harbours; surface a plateau, highest in e., where Drakensbergs rise to 10,763 ft. in Mont-aux-Sources, and in s., where veld is reached by Little and Great Karroos; chief rivs., Orange, flowing w. to Atlantic Ocean, and Limpopo, entering Indian Ocean through Portuguese terr. The climate is warm and generally healthy; summer rains heaviest on e. of Drakensbergs, where S.E. Trades prevail; winter rains in s.w. form Brave W. Winds; much of w. is arid (Kalahari Desert); irrigation necessary; few forests. Principal resources are mineral—gold, diamonds, coal, copper, tin; pastoral lands support sheep, goats, cattle, and horses; many ostriches; chief crops are maize, wheat, oats, barley, Kaffir corn, tobacco and cotton, with smaller quantities of sugar-cane and tea; fruits include grapes, oranges, pears. Over half the foreign trade is carried on with Brit. Empire; principal exports, gold, wool, diamonds, hides and skins, maize, wattle-bark, and coal. Main rly. lines link Cape Town with S. Rhodesia and with Orange Free State and Transvaal, whence lines to Durban and to Lourenço Marques (Portuguese E. Africa).

Union consists of four original provs. (Cape of Good Hope, Natal, Orange Free State, and Transvaal), federated in 1910; administers mandated S.W. Africa; Basutoland and Swaziland not included in Union. Provs. have each an administrative and a provincial council to administer local affairs; English and Dutch languages are both official. There are four univs., one at Cape Town, one at Stellenbosch, the Witwatersrand Univ. at Johannesburg, and the Univ. of S. Africa with constituent colleges at Pretoria, Grahamstown, Pietermaritzburg, Bloemfontein, Wellington,

and Potchefstroom. Pretoria is the seat of administration for the Union, and Cape Town the seat of legislature. Of the total pop. c. 1,700,000 are Europeans; of remainder, 4,700,000 are Bantus, and 170,000 are Indians. Area, 472,000 sq. m.; pop. 7,000,000. See articles on separate provs.

South'all Nor'wood, urb. dist. and mkt. tn., Middlesex, England, part of Greater London; chemical works. Pop. 38,900.

South America. See AMERICA.

Southamp'ton, port and co. bor., Hants, England, situated on Southampton Water between Rs. Itchen and Test; has remains of old fortifications, including the Bar Gate, dating from 11th cent.; Univ. Coll.; headquarters of Ordnance Survey Dept.; has splendid harbour, with advantage of double tides, due to the passage of high tide from the English Channel up the Solent and two hours later up Spithead; most important mail-packet station in England; map making; yacht building and marine engineering works. Pop. 176,000.

Southamptonshire. See HAMPSHIRE.

South Australia, state of Australia; bounded e. by Queensland, New South Wales, and Victoria; s. by Indian Ocean; w. by Western Australia; n. by Central Australia. In s.e. are estuary of Murray R. at Encounter Bay, Gulf of St. Vincent (with Kangaroo I. at its mouth), and Spencer Gulf; the last runs inland for over 200 m., and from its head northward are the basins of Lake Torrens and Lake Eyre; to w. of Lake Torrens is Lake Gairdner. Interior forms part of great central plateau of continent; very largely desert, though n.e. portion can provide artesian water; crossed by various mountain ranges (Flinders, Gawler, Stuart, Musgrave). There is a considerable variation in temperature and rainfall. Agriculture is the principal industry; live-stock largely raised; wheat, oats, and barley produced; oranges, olives, and other fruits are grown. Minerals include copper, iron, gypsum, phosphate

rock; manufactures wines, olive oil, flour; chief exports, wool, wheat, flour, copper, skins and hides, frozen meat, wine, fruits, butter, leather. Cap. is Adelaide. Area, 380,070 sq. m.; pop. 579,000.

Southbank in Normanby, par. and vil., Yorks, England, in Eston urb. dist.; iron and steel works. Pop. (par.) 17,000.

South Bend, city, Indiana, U.S.A., on R. St. Joseph, 75 m. E. of Chicago; carriage and wagon works, iron foundries, paper mills, flour mills; agricultural machinery. Pop. 104,000.

Southborough, urb. dist., Kent, England, $1\frac{1}{2}$ m. N. of Tunbridge Wells; residential dist., with mineral springs. Pop. 7,400.

Southbridge, tn., Massachusetts, U.S.A., 18 m. S.W. of Worcester; optical instruments and cutlery. Pop. 14,000.

South Carolina, South Atlantic State, U.S.A., bounded N. and N.E. by N. Carolina, S.E. by Atlantic, W. by Georgia. Surface is level in E., where a low-lying plain extends a considerable distance inland from the coast; undulating in centre, and mountainous in W., reaching an extreme height of 3,548 ft. in Mt. Sassafras, on boundary between N. and S. Carolina; drained by Great Pee Dee (with Little Pee Dee and Lynch), Santee, and Edisto rivers. Climate is healthy and temperate, but coast regions suffer from hurricanes. Principal industry is agriculture; produces wheat, maize, oats, rice. Live-stock is extensively raised; cotton and tobacco are grown in large quantities. Minerals are relatively unimportant. Fisheries are of increasing importance, and lumbering is carried on. Manufactures include cottons, timber, and lumber products, fertilizers, cotton-seed oil. Chief towns are Columbia (cap.), Charleston (chief port), Greenville, and Spartanburg. Area, 30,989 sq. m. Pop. 1,683,000.

South Dakota, North Central State, U.S.A.; bounded N. by North Dakota, W. by Montana, Wyoming, S. by Ne-

braska, E. by Iowa, Minnesota. Surface generally undulating prairie land; drained by R. Missouri and tribs. In S.W. are the Black Hills and the Bad Lands. Principal industry is agriculture; cattle, sheep, horses, mules, and pigs are extensively raised, and wheat, maize, oats, barley, rye, and flax are grown; dairy farming is carried on, and fruits and vegetables are cultivated. Minerals include gold, silver, lead, copper. Manufactures include flourmilling, butter and cheese making. Lumbering is carried on in the forest districts of the Black Hills. Chief tns., Pierre (cap.), Sioux Falls, and Aberdeen. Area, 77,615 sq. m.; pop. 681,000.

Southend-on-Sea, co. bor., Essex, England, at mouth of R. Thames; seaside resort much frequented by Londoners. Pop. 120,100.

South Foreland. See FORELAND.

Southgate, urb. dist., Middlesex, England; residential suburb of London. Pop. 55,600.

South Georgia, Brit. island, S. Atlantic; centre of whaling and sealing. Uninhabited except for whaling settlement. Area, 1,000 sq. m.

South Holland, prov., Holland; deltaic plain between Rs. Maas and Waal; chief occupations are agriculture and dairy farming. Chief tn., Rotterdam. Area, 1,134 sq. m.; pop. 1,900,000.

South Molton, mkt. tn., N. Devon, England, on R. Mole, 10 m. S.E. of Barnstaple; corn mills; agricultural implements. Pop. 2,800.

South Orkneys, group of small islands in S. Atlantic Ocean, c. 800 m. S.E. of Falkland Is., of which they are a dependency; whaling centre.

Southowram, urb. dist., W. Riding, Yorks, England; near Halifax; woolen goods; coal mines and stone quarries. Pop. 2,600.

Southport, co. bor. and wat.-pl., Lancs, England, on Irish Sea, 18 m. N. of Liverpool; extends 2 m. along the coast. Pop. 78,000.

Southsea, tn., Hants, England; forms part of Portsmouth; resi-

dential suburb and wat.-pl. Pop. 44,600.

South Shetland Islands, mountainous archipelago in S. Atlantic Ocean; whaling centre. Area, 880 sq. m.

South Shields, co. bor. and port, Durham, England, at mouth of R. Tyne; manufactures glass, chemicals; shipbuilding; printing machinery; exports coal. Pop. 113,400.

Southwark (*suth'ark*), metropolitan bor., London, on s. side of Thames, opposite the City. Contains Guy's Hospital. Glass making, brewing, tanning. Pop. 171,700.

Southwell (*suth'el*), mkt. tn., Notts, England, 6 m. w. of Newark; cathedral; silk and lace factories. Pop. 3,000.

South-West Africa, formerly GERMAN S.W. AFRICA, terr., S. Africa; bounded n. by Portuguese W. Africa, N. Rhodesia, e. by Bechuanaland and Cape Prov., s. by Cape Prov., w. by Atlantic Ocean. Administered under mandate by Union of S. Africa. Coastal belt, 30 to 40 m. broad, is desert. Surface, a series of undulating plateaus (2,000-6,000 ft.); Kalahari Desert in e.; of rivs. only Okavango, Kunene, and Orange have water all year round. Country suited for stock raising; cattle and ostriches reared on plateaus; maize, potatoes, pumpkins, Kaffir corn, and beans grown; cotton in Outjo dist.; diamonds, tin, and copper are chief minerals. Cap. Windhoek. Area, 322,768 sq. m.; pop. 259,000 (24,000 whites).

Southwick. (1) Town, Durham, England, on R. Wear; suburb of Sunderland; manufactures glass and earthenware. Pop. 13,800. (2) Urb. dist., Sussex, England, 4 m. w. of Brighton; oyster fisheries; wat.-pl. Pop. 6,100.

Southwold, mkt. tn. and port, Suffolk, England; seaside resort; fisheries. Pop. 2,800.

Sowerby Bridge (*sor'bi*), urb. dist., W. Riding, Yorks, England, on R. Calder, 2½ m. s.w. of Halifax; textiles, engineering, chemical works. Pop. 14,700.

Soyland, urb. dist., W. Riding, Yorks, England, 4 m. s.w. of Halifax; textiles. Pop. 3,100.

Spa, wat.-pl., Belgium, 20 m. s.e. of Liège; mineral springs; wooden lacquered articles. Pop. 8,300.

Spain, rep., w. Europe; a kingdom until 1931; occupies larger part of Iberian peninsula; bounded on n. by Bay of Biscay and France, w. by Atlantic Ocean and Portugal, s. and e. by Mediterranean Sea; separated from African coast by Strait of Gibraltar (minimum width about 9 m.); coast rocky, with numerous rias in n. and n.w.; s. and e. coasts generally flat, with few indentations. Interior consists mainly of tableland known as the Meseta (average elevation 2,000-3,000 ft.), deeply dissected by rivers flowing from e. to w. Chief mts., Pyrenees in n.w. (forming boundary between France and Spain), with Maladetta (11,165 ft.); Cantabrian Mts. in n., a continuation of Pyrenees; Sierra de Guadarrama and Toledo Mts. in central region; Sierra de Greda and Sierra de Gata, w.; Sierra Nevada, with Mulhacen (11,420 ft.), s. Principal rivs. are Douro, Tagus, Guadiana, and Guadalquivir, flowing into Atlantic Ocean, and Ebro, flowing into Mediterranean. Climate of tableland is continental, with scanty rainfall; n. and n.w. are mild, with heavy rainfall; s. districts have Mediterranean climate. Flora is varied: n. mar. provinces have central European vegetation; most of the central region contains steppe-like vegetation, chiefly esparto grass; flora of Mediterranean districts includes date-palm, sugar-cane, and other tropical plants. Agriculture is the main occupation, the principal products being wheat, barley, olives, flax, hemp, esparto grass, fruits (oranges, lemons, grapes, almonds); important wine industries—famous sherries made in s., and red wines in n.; manufactures of cotton and woolen goods, silks, machinery, paper, tobacco (a state monopoly), sugar, cork; principal industries are in

Catalonia; fine horses are bred in Andalusia, sheep and swine in Estremadura, cattle in Galicia; extensive fisheries (tunny, sardines, cod); rich in minerals—iron, copper, coal, lead, zinc, mercury, sulphur, manganese; numerous mineral springs. The Canary islands are treated as an integral part of Spain; Ceuta, on the African shore, forms a prov. with Cadiz. Chief tns., Madrid (cap.), Barcelona, Valencia, Seville, Malaga, Murcia. Area, 190,050 sq. m.; pop. 22,000,000.

Foreign possessions of Spain are: Spanish Morocco, and on w. coast of Africa Rio de Oro and Adrar; Spanish Guinea (Rio Muni Settlement); Fernando Po and other islands in Gulf of Guinea.

Spalato. See **SPLIT**.

Spal'ding, mkt. tn. and port, Lincolnshire, England, on R. Welland; agricultural centre; industries include bulb growing, market gardening, saw-milling, brewing. Pop. 12,600.

Span'dau, tn., Brandenburg, Prussia, at junction of Rs. Havel and Spree; suburb of Berlin; manufactures small-arms, artillery. Pop. 110,000.

Spanish Guinea, or **RIO MUNI SETTLEMENT**, Spanish colony, W. Africa, on E. of Gulf of Guinea between R. Campo and R. Muni; much of surface covered by marshes and forests. Produces rubber, timber, palm oil, and coffee. Chief tn., Santa Isabel. Area, 10,036 sq. m.; pop. 140,000.

Spar'ta, city of anc. Greece, cap. of Laconia in the Peloponnesus, famous for the warlike prowess of its citizens. Modern tn. is also cap. of Laconia. Pop. 6,000.

Spartanburg, city, S. Carolina, U.S.A., 93 m. n.w. of Columbia; cotton-growing region; cotton mills; fertilizers. Pop. 29,000.

Spentborough, urb. dist., W. Riding, Yorks, England, 6 m. s.e. of Bradford; woollens. Pop. 31,000.

Spennymoor, urb. dist. and mkt. tn., Durham, England, 5 m. s. of Durham; coal is mined; great iron and steel works. Pop. 16,400.

Spey (*spa*), river, Scotland; rises in Monadhliath Mts., and flows in n.e. direction to Moray Firth; most rapid river in Scotland; salmon fisheries. Length, 107 m.

Speyer (*spī'er*), or **SPIRES**, tn., Bavaria, Germany, on R. Rhine; cap. of Palatinate; tobacco, beer, sugar, paper, vinegar, and musical instruments are manufactured. Pop. 26,000.

Spezia (*spā'tsi-a*), wat.-pl., Liguria, n.w. Italy, on Bay of Spezia; chief Italian arsenal and naval station; docks and shipbuilding yards; electrical machinery; exports olive oil. Pop. 110,000.

Spice Islands. See **MOLUCCAS**.

Spils'by, mkt. tn., Lincolnshire, England, 15 m. n. of Boston; trade in agricultural produce; birthplace of Sir John Franklin, the Arctic explorer. Pop. 1,400.

Spirea. See **SPEYER**.

Spit'alfelds, dist., Stepney, London, 1 m. n.e. of St. Paul's; former seat of silk-weaving industry. Pop. 24,200.

Spit'head, strait, English Channel, separating E. Isle of Wight from Hampshire, England; leads to Southampton Water; 12 m. long by 4 m. broad.

Spits'bergen, or **SVALBARD**, Norwegian archipelago of five large and several small islands in Arctic Ocean, c. 300 m. to n. of Norway; largest are W. Spitsbergen, North-East Land, and Edge I.; surface generally an ice-covered plateau, with highest point over 5,000 ft.; climate arctic; s.w. winds and Atlantic drift keep W. Spitsbergen free from ice in summer; considerable wealth of plant life in summer, but no trees; animals include reindeer, polar bear, ptarmigan, and eider duck; seals and whales are fast disappearing from vicinity, and fur-bearing animals need protection. Important mineral deposits have been discovered; coal is mined; iron ore, gypsum, zinc, and asbestos exist. Longyearbyen is chief camp. Area, 25,000 sq. m.; pop. c. 1,500.

Split, formerly **SPALATO**, port, Dalmatia, Yugoslavia, on Adriatic Sea;

fine harbour; exports wine and oil; numerous Roman remains. Pop. 30,000.

Splügen Pass, pass across Alps, leading from Grisons to Como; highest point, 6,946 feet.

Spokane (*spo-kan'*), city, E. Washington, U.S.A., on falls of R. Spokane; extensive trade in lumber; flour and saw mills; wheat, fruit, and live-stock extensively shipped; has immense water-power from river. Pop. 116,000.

Spoleto (*spo-lá'to*), tn., Italy, 60 m. N. of Rome; has cathedral containing frescoes by Filippo Lippi; produces truffles, preserved goods, and earthenware; tanning and spinning of cotton and wool. Pop. 28,000.

Sporades (*spor-ad-iz*), islands of the Archipelago, S. Aegean Sea, consisting of two groups surrounding Cyclades, the northern group belonging to Greece, the southern to Italy.

Spree (*sprü*), river, Prussia; rises in Saxony, flows N.W. through Berlin, and joins R. Havel at Spandau. Length, 227 m.; navigable for 100 m.

Sprenberg, town, Brandenburg, Prussia, on isl. of R. Spree, 14 m. S. of Kottbus; cloth, machinery, bicycles, tobacco. Pop. 13,000.

Springfield. (1) City, Massachusetts, U.S.A., on R. Connecticut, 85 m. W.S.W. of Boston; U.S. arsenal; manufactures paper, electrical machinery, motor-cars. Pop. 150,000.

(2) Tn., cap., Illinois, U.S.A., on R. Sangamon, 180 m. S.W. of Chicago; important railway centre; state capitol and arsenal; coal mining, iron industries, watches, agricultural machinery, shoes, miners' lamps; was home and burial-place of Abraham Lincoln. Pop. 72,000. (3) City, Ohio, U.S.A., on R. Lagonda, 68 m. N.E. of Cincinnati; produces machinery, hardware, agricultural implements. Pop. 68,000. (4) City, Missouri, U.S.A., 150 m. S.E. of Kansas City; manufactures machinery; surrounding country noted for fruit, poultry, and dairy products. Pop. 58,000.

Springhead, urb. dist., W. Riding,

Yorks, England, 1 m. S.E. of Oldham; large cotton manufactures. Pop. 4,800.

Springhill, tn., Nova Scotia, Canada, 75 m. N.W. of Halifax; coal mining. Pop. 5,800.

Srinagar, cap., Kashmir, N. India, on R. Jhelum, 115 m. N.E. of Rawalpindi; formerly shawl-weaving centre, now engaged in silver and copper working, wood carving, carpet weaving, and manufacture of paper and leather. Pop. 142,000.

Stade (*stá'da*), tn., Hanover, Germany, on R. Schwinge, 20 m. W. by N. of Hamburg; leather, cigars, alcohol. Pop. 12,000.

Staffa, small, uninhabited isl., Inner Hebrides, Argyllshire, Scotland, 6 m. N. of Iona, contains numerous basaltic caverns (largest, Fingal's Cave); excellent pasture. Area, 71 ac.

Stafford, co. tn., Staffs, England, on R. Sow, 16 m. N. of Wolverhampton; makes boots and shoes; salt made from brine spring. Pop. 29,500.

Staffordshire (**STAFFS**), midland co., W. England; bounded by Cheshire, Derbyshire, Leicestershire, Warwickshire, Worcestershire, and Shropshire. Surface is generally level in centre, with hills in N. and S.; drained by R. Trent and its affluents, of which most important is the Dove. Large coal-fields in N. and S., former almost entirely covered with towns engaged in manufacture of pottery; 'Black Country,' on S. coalfield, with large iron manufactures; agriculture is carried on, oats being the chief crop; beer is largely manufactured at Burton; gypsum, zinc ore, and copper ore also occur. Co. tn., Stafford. Area, 1,158 sq. m.; pop. 1,431,200.

Staines (*stá'nz*), urb. dist., Middlesex, England, at confluence of Rs. Colne and Thames, 6 m. S.E. of Windsor; part of Greater London; breweries and mustard mills. Pop. 21,200.

Stainland, urb. dist., W. Riding, Yorks, England, 3 m. S.W. of Halifax; cottons and woollens. Pop. 4,200.

Staithes (*stá'ths*), fishing vil., Yorks, England, 9 m. N.W. of Whitby.

Sta'in, formerly YUZOVKA, tn., Ukraine, U.S.S.R., 150 m. s.e. of Kharkov; coal, iron, and manganese in vicinity; iron rails. Pop. 106,000.

Sta'ingrad, formerly TSARITSYN. (1) Prov., Russia; plain on both sides of lower R. Volga; chief crops are wheat, rye, sunflower, barley, oats, potatoes, maize. Area, 34,065 sq. m.; pop. 1,407,000. (2) Cap. of above, on R. Volga; metal ware, machinery, chemicals; oil refinery. Pop. 149,000.

Sta'lybridge, tn., Cheshire, England, on R. Tame, 7 m. e. of Manchester; cotton mills, foundries, engineering works. Pop. 24,800.

Stan'ford. (1) Mkt. tn., Lincolnshire, England, on R. Welland, 12 m. n.w. of Peterborough; centre of agricultural dist.; coach and wagon factories, motor and engineering works, breweries. Pop. 9,900. (2) Tn., Connecticut, U.S.A., on Long Island Sound; mainly residential; hardware and chemicals. Pop. 46,000.

Stan'derton, tn., Transvaal, S. Africa, on R. Vaal, 80 m. s.e. of Johannesburg; coal mines; agricultural centre. Pop. (white) 2,300.

Standish with Langtree, urb. dist., Lancs, England, 3 m. n.w. of Wigan; coal mines. Pop. 7,300.

Stan'hope, mkt. tn., Durham, England, 17 m. w. by s. of Durham, on R. Wear; ironstone and limestone occur in vicinity. Pop. 2,000.

Stanimak's (German *Stanislaw*), tn., Bulgaria, 13 m. s.e. of Philippopolis; large trade in wine. Pop. 17,000.

Stanislawow (*stan-is-waw'uf*). (1) County, Poland; fertile plain in n., and rising to Carpathian Mts. in s.; watered by tribs. of R. Dniester; heavily forested; horses and dairy cattle; oilfields. Area, 7,092 sq. m.; pop. 1,339,000. (2) Chief tn. in above, 58 m. s.w. of Tarnopol; rly. centre and workshops; tanneries, flourmills, dye works; trade in agricultural produce. Pop. 28,000.

Stan'ley. (1) Urb. dist., Durham, England, 7 m. w. of Durham; coal mines. Pop. 24,500. (2) Par. and vil., Derbyshire, England, 5 m. n.e.

of Derby; coal mines, ironworks, brickfield. Pop. (par.) 1,400. (3) Urb. dist., W. Riding, Yorks, England, 2 m. n.e. of Wakefield; collieries. Pop. 14,600. (4) Vil., Perthshire, Scotland, on R. Tay, 7 m. n. of Perth; cotton mills. Pop. 1,200. (5) Tn., Falkland Is.; whaling centre. Pop. 1,000.

Stanley Pool, expansion (20 m. by 15 m.) of lower R. Congo, Africa; edged by mountains (1,000-3,000 ft. on s. side); contains island of Banu and numerous sandbanks; Brazzaville stands at w. end.

Stanleyville, station, Belgian Congo, Africa, on R. Congo, below Stanley Falls and just n. of equator; railway laid round Falls to Ponthierville.

Stan'more, GREAT, par. and vil., Middlesex, England, 3 m. n.e. of Harrow; anc. Roman station; brewing. Pop. (par.) 2,100.

Stan'ningley, eccles. dist., W. Riding, Yorks, England, 5 m. w. of Leeds; woollens. Pop. 4,500.

Stan'nington, vil., Yorks, England, 4 m. w. by n. of Sheffield; paper and corn mills, collieries. Pop. 4,000.

Stan'ton and New'hall, par., Derbyshire, England, 2 m. s.e. of Burton-on-Trent; manufactures pottery; large coal mines. Pop. 6,000.

Sta'pleford, par., mkt. tn., Notts, England, 6 m. w. of Nottingham; manufactures silk and lace. Pop. 8,500.

Staraya-Russa (*stā-rī'ā-roo'sā*), tn., n.w. Russia, 36 m. s. of Novgorod; saline baths, salt deposits; trade in cereals and flax. Pop. 22,000.

Star'a-Zag'ora, tn., Bulgaria, 50 m. n.e. of Philippopolis; copper foundries, tanneries, mineral springs; attar of roses and silk produced in vicinity. Pop. 29,000.

Star'cross, wat.-pl., Devonshire, England, on estuary of R. Exe; connected to Exmouth by ferry. Pop. 1,100.

Star'gard, tn., Pomerania, Prussia, 22 m. by rail e. of Stettin; machinery, tobacco, spirits, woollen and cotton goods; was member of Hanseatic League. Pop. 33,000.

Star'i Becej (*beck'ey*), formerly O Bece, tn., Yugoslavia, 60 m. n.w. of Belgrade; trade in grain and fruit. Pop. 20,000.

Stassfurt (*stass'foort*), tn., Saxony, Prussia, 19 m. s. of Magdeburg; potash and rock-salt mines; chemical works. Pop. 16,000.

Statens Island (*sta'ten*), at mouth of R. Hudson, U.S.A., included in city of New York; lumber mills and shipyards. Area, 57 sq. m.; pop. 117,000.

Stavanger, port, s.w. Norway, on Bukken Fjord; fishing station; important fish canneries; shipbuilding; iodine. Pop. 44,000.

Staveley (*stäv le*), tn., Derbyshire, England, 12 m. s.e. of Sheffield; collieries, ironworks, corn mills; manufactures brushes, and spades and shovels. Pop. 13,000.

Star'ropol, tn., N. Caucasian Area, Russia; agricultural implements; textiles, oil. Pop. 59,000.

Stawell, tn., Victoria, Australia, 80 m. w.n.w. of Melbourne; gold mining. Pop. 4,400.

Stee'ton with Eastburn, par. and vil., Yorks, England, 3 m. n.w. of Keighley; worsted and ribbon mills. Pop. (par.) 2,300.

Stel'larton, tn., Nova Scotia, Canada, 75 m. n.e. of Halifax; on Pictou coalfield; iron and steel. Pop. 5,400.

Stel'lenbosch, tn., Cape Prov., S. Africa, 25 m. e. of Cape Town; important educational centre; univ.; wine and fruit-growing centre; manufactures jam. Pop. 7,000.

Sten'dal, tn., Saxony, Prussia, 33 m. n. of Magdeburg; railway workshops; manufactures machinery, tobacco, textiles, gold-leaf. Pop. 30,000.

Step'ney, metropolitan bor., London, 2 m. e. of St. Paul's; varied industries carried on. Pop. 225,200.

Stern'berg, tn., Moravia, Czechoslovakia, 47 m. n.e. of Brno; centre of cotton and linen industry; manufactures sugar, liqueurs, and bricks; flax and tobacco are grown in vicinity. Pop. 15,000.

Stettin', Free Port, Pomerania, Prussia, on R. Oder; former member

of Hanseatic League; waterway connects with Berlin; shipbuilding, machinery, chemicals, oil refining, sugar, paper, porcelain, cement. Pop. 254,000.

Stuebenville (*stä'bē-vil*), city, Ohio, U.S.A., on R. Ohio, 23 m. n. of Wheeling; manufactures iron, steel, paper, glass; coal, petroleum, and natural gas occur in neighbourhood. Pop. 35,000.

Stev'enage, urb. dist. and mkt. tn., Herts, England, 4 m. s.e. of Hitchin. Pop. 5,500.

Ste'venston, tn., Ayrshire, Scotland, 1½ m. n.e. of Saltcoats; coal, iron, chemicals, and explosives. Pop. 8,200.

Stewart Island, New Zealand; separated from s. end of South Island by Foveaux Strait; mountainous and heavily wooded; tourist centre; oyster fishing. Area, 665 sq. m.; pop. 300.

Stewarton, tn., Ayrshire, Scotland, on R. Annick, 5 m. n. of Kilmarnock; dairy produce; carding and spinning industries; manufactures Scotch 'bonnets.' Pop. 2,700.

Steyning (*sten'ing*), mkt. tn., Sussex, England, 5 m. n.w. of Shoreham; anc. place, formerly on coast; manufactures parchment and beer. Pop. 1,900.

Steyr (*stir*), tn., Upper Austria, 20 m. s. of Linz; manufactures iron and steel, electrical plant, and bicycles. Pop. 22,000.

Still'water, city, Minnesota, U.S.A., on R. St. Croix, 20 m. n.e. of St. Paul; lumber trade; manufactures agricultural machinery. Pop. 7,000.

Stil'ton, vil., N. Hunts, England; gives name to a famous variety of cheese. Pop. 500.

Stir'ling, royal burgh and co. tn., Stirlingshire, Scotland, on R. Forth; anc. royal castle; Wallace Monument on neighbouring Abbey Craig. Stirling is surrounded by battlefields, including Bannockburn. Chief manufactures are carpets, tartans, tweeds, rubber goods, agricultural implements, furniture; railway centre. Pop. 22,600.

Stirlingshire, midland co., Scotland, bounded by cos. of Perth, Dumbarton, Lanark, W. Lothian, and Clackmannan. Surface hilly in N.W. and centre (Ben Lomond, 3,293 ft.); in E. are wide fertile plains or carse of Stirling and Falkirk; drained mostly by R. Forth; large deposits of coal and iron; has ironworks and manufactures of textiles and chemicals. Co. tn., Stirling. Area, 451 sq. m.; pop. 166,400.

Stockholm (*stok'hölm*), cap., Sweden; beautifully situated on rocky islands and mainland at outlet of Lake Mälär to Baltic. Staden (old town) has narrow steep streets, quaint gabled houses, royal palace, Storkyrka (great church). Norrmalm, residential quarter, has fine broad streets, large squares, parks, univ., Royal Operahouse, national museum, national library and statues. Busy port and large industrial centre; chief industries are shipbuilding, iron foundries, machinery, cotton, linen, leather, sugar, breweries, chemicals. Pop. 474,000.

Stockingford, eccles. dist. and vil., Warwickshire, England, 1½ m. W. of Nuneaton; collieries; manufactures tiles, blue bricks, and drain pipes. Pop. (dist.) 11,000.

Stockport, co. bor., Cheshire, England, on R. Mersey; cotton, hat making, and alkali industries; iron and brass founding, machinery, leather. Pop. 125,500.

Stocksbridge, urb. dist., W. Riding, Yorks, England, 7½ m. S.W. of Sheffield; coal mines and steel wire works. Pop. 9,300.

Stockton, city, California, U.S.A., on R. San Joaquin, 75 m. E. of San Francisco; commercial centre; agricultural implements, flour, lumber, leather. Pop. 48,000.

Stockton Heath, par. and vil., Cheshire, England, on Bridgewater Canal, 1 m. S. of Warrington; spades are manufactured. Pop. (par.) 4,700.

Stockton-on-Tees, river port, Durham, England, on R. Tees; blast furnaces and rolling mills; manufac-

tures marine engines, railway and bridge material, pottery, glass. First railway in Great Britain laid between Stockton and Darlington (1825). Pop. 67,700.

Stoke Newington, metropolitan bor., London, England, 3 m. N. of St. Paul's; waterworks and reservoirs. Pop. 51,200.

Stoke Poges (*pō'jis*), vil. and par., Bucks, England, 2 m. N. of Slough station; old church; churchyard is scene of Gray's *Elegy*. Pop. (par.) 1,700.

Stoke Prior, par. and vil., Worcestershire, England, 4 m. N.E. of Droitwich; salt and alkali works. Pop. 3,000.

Stoke-upon-Trent, co. bor., Staffs, England; chief centre of porcelain and earthenware manufacture; coal mining, manufacture of machinery; important railway centre. Stoke-upon-Trent includes Burslem (the 'Mother of the Potteries'), Fenton, Hanley, Longton, and Tunstall. Pop. 276,600.

Stolberg, tn., Rhineland, Prussia, 6 m. E. of Aachen; manufactures iron, zinc, and brass goods. Pop. 17,000.

Stolp, tn., Pomerania, Prussia, 65 m. W. of Danzig; manufactures machinery, amber goods, linen, tobacco, alcohol. Pop. 42,000.

Stone, mkt. tn. and urb. dist., Staffs, England, on R. Trent, 7 m. N. of Stafford; breweries, boot and shoe factory. Pop. 6,000.

Stonefield, tn., Lanarkshire, Scotland, 3 m. S.W. of Hamilton; coal mining. Pop. 8,000.

Stonehaven, seaside resort, Kincardineshire, Scotland, 16 m. by rail S.W. of Aberdeen; herring-fishing centre; tanneries, distilleries. Pop. 4,200.

Stonehenge, remarkable group of huge stone circles in Salisbury Plain, Wilts, England, 7 m. N. of Salisbury. Their erection is generally attributed to the late Stone or the Bronze Age, and their use was probably both monumental and religious. Stonehenge is now the property of the nation.

Stonehouse. (1) Tn., Lanarkshire, Scotland, on Avon Water, 6 m. s.e. of Hamilton; coal mining. Pop. 3,600. (2) Par. and vil., Gloucestershire, England, 3 m. n.w. of Stroud; manufactures bricks and woollens. Pop. (par.) 2,400. (3) Or **EAST STONEHOUSE.** See under **PLYMOUTH.**

Stony Stratford, mkt. tn., Bucks, England, on R. Ouse, 8 m. n.e. of Buckingham; engineering works. Pop. 2,000.

Stornoway, port, Lewis I., Ross-shire, Scotland; chief town in Outer Hebrides; herring-fishery centre. Pop. 3,800.

Stourbridge, tn., Worcestershire, England, on R. Stour, 10 m. w. of Birmingham; glass manufacture; iron and chain works, manufacture of parchment, fire-clay goods; coal mined in vicinity. Pop. 19,900.

Stourport, tn., Worcestershire, England, 4 m. s.w. of Kidderminster, at confluence of Rs. Stour and Severn; ironfounding, carpet weaving, tanning, tin stamping. Pop. 5,900.

Stowmarket, mkt. tn., Suffolk, England, 12½ m. n.w. of Ipswich; agricultural implements, gun-cotton and cordite, leather. Pop. 4,300.

Stow-on-the-Wold (stō-), urb. dist., Glos, England, in Cotswold Hills, 13 m. e. of Cheltenham; mkt. tn. Pop. 1,300.

Strabane (strā-ban'), mkt. tn., co. Tyrone, N. Ireland, at head of R. Foyle; market gardens; shirt making. Pop. 5,200.

Strait Settlements, British crown colony, Malay Peninsula, Asia; comprises Singapore (including Cocos Is., Christmas I., and Labuan), Penang (including Prov. Wellesley and the Dindings), Malacca. Ports are free from customs duties; trade mainly transit; exports are rubber, tin, spices, copra, sago, tapioca. Cap. Singapore. Area, c. 1,600 sq. m.; pop. 884,000. See separate articles.

Stralsund, tn., Pomerania, Prussia, on Baltic Sea, 86 m. by rail n.w. of Stettin; manufactures machinery, electric lamps, gloves, paper, soap, cement. Pop. 39,000.

Stranraer (stran-rär'), royal burgh and port, Wigtownshire, Scotland, on Loch Ryan; creameries; manufactures dairy implements; daily steamer service to Larne, Ireland (shortest sea passage); fisheries. Pop. 6,500.

Strasbourg, chief tn., Bas-Rhin, France, on R. Ill; famous cathedral with remarkable astronomical clock; univ. Great German fortress (1870-1918). Chief products are machinery, jewellery, hardware, tobacco, *poté de foie gras*; brewing, tanning, printing. Pop. 174,000.

Stratford. (1) Dist., Essex, England, on R. Lea; part of Greater London; chemicals, candles, paint, varnish manufactured; large railway shops. Pop. 28,000. (2) Tn., Ontario, Canada, on R. Avon, 83 m. s.w. of Toronto; manufactures woollen goods, furniture, threshing machines; sawmills, flour mills, locomotive repair shops. Pop. 16,000.

Stratford-on-Avon, tn., Warwickshire, England, on R. Avon, 8 m. s.w. of Warwick; birthplace of Shakespeare; contains his tomb and numerous other associations with the poet. Trade chiefly agricultural. Anne Hathaway's cottage. Pop. 11,600.

Strathaven (strā'ven), mkt. tn., w. Lanarkshire, Scotland, near R. Avon, 16 m. s.e. of Glasgow; manufactures silk, cotton, hosiery; trade in cattle and cheese. Pop. 4,200.

Strathmore ('great valley'), plain, Scotland, between Grampian Mts. and Ochil and Sidlaw Hills; extremely fertile. Length, c. 100 m.; breadth, up to 10 m.

Strathpeffer, health resort, Ross and Cromarty, Scotland, 5 m. w. of Dingwall; sulphurous and chalybeate mineral wells. Pop. 900.

Stratton and Bude. See **BUDE.**

Straubing (strā'bing), tn., Bavaria, Germany, on R. Danube, 25 m. by rail s.e. of Ratisbon; manufactures machinery and chemicals; breweries and tanneries. Pop. 24,000.

Streatham (stret'am), residential dist., s.w. London, England; Magda-

len Hospital and Brit. Home for Incurables; Streatham Common covers about 60 ac. Pop. 53,000.

Streator (*stré'tor*), city, Illinois, U.S.A., on R. Vermilion, 82 m. s.w. of Chicago; manufactures bricks and tiles, glass, hardware, agricultural implements; coal. Pop. 15,000.

Street, urb. dist., Somerset, England, 2 m. s.w. of Glastonbury; boots and shoes. Pop. 4,500.

Streetford, urb. dist., Lancs, England, 4 m. s.w. of Manchester; textiles and machinery. Pop. 56,800.

Stromboli (*strom'bô-lê*), isl., Lipari group, N. of Sicily, Mediterranean Sea; volcano (alt. 3,090 ft.), known as 'Lighthouse of the Mediterranean,' almost constantly active.

Stromness, port, s.w. Mainland, Orkney, Scotland, 14 m. w. of Kirkwall; summer resort; fishing and distilling; noted harbour of refuge. Pop. 1,600.

Strood, tn., Kent, England, on R. Medway, connected by bridge with Chatham and Rochester; large seed-crushing mills. Pop. 10,000.

Stroud, mkt. tn., Gloucestershire, England, 8 m. s. of Gloucester; chief seat of w. of England fine cloth manufacture; long famous for scarlet dyes; breweries, sawmills, iron foundries. Pop. 8,400.

Struma (*stroo'ma*), river, Balkan Peninsula, Europe; rises in Bulgaria about 20 m. s. of Sofia; flows w. and s.e. through Bulgaria and Macedonia to enter Aegean Sea. Length, 150 m.

Stryj (*strî*), tn., Poland, on R. Stryj, 40 m. s.w. of Lwow; tanneries, sawmills, manufacture of matches. Pop. 27,000.

Studley, par. and vil., Warwickshire, England, 13 m. w. of Warwick; manufactures needles, bodkins, and fish-hooks. Pop. (par.) 3,000.

Stuttgart (*stoot'gurt*), cap., Württemberg, Germany, on R. Neckar; old churches and many fine modern buildings; great publishing centre; also textiles, pianos, chemicals, furniture, artists' colours, jewellery, cigars. Pop. 342,000.

Styria (*stîr'e-a*), prov., Austria, divided into northern or Upper Styria, and southern or Lower Styria; in E. Alps; traversed by Rs. Mur, Drave, and Enns; rich mineral deposits (iron, coal, copper); extensive forests; fertile mountain valleys; prov. contains numerous mineral springs; manufactures iron and steel. Cap. Graz. Area, 6,323 sq. m.; pop. 979,000.

Suskin (*sou-â'kin*), port, Anglo-Egyptian Sudan, on w. coast of Red Sea; occupies coral islet close to mainland; connected by rly. with Berber; exports tobacco, ivory, gums, mother-of-pearl; valuable pearl fisheries. Pop. 8,000.

Subiseo (*sou-be-â'ko*), tn., Italy, on R. Anio; surrounded by Sabine Mts., 30 m. E. of Rome; ironworks, paper mills. Pop. 8,200.

Subotica (*sub-o-tit'sa*), formerly SZABADKA or MARIA-THERESIOPEL, tn., Voivodina, Yugoslavia, near Hungarian frontier; centre of agricultural and cattle-rearing region; boots, railway trucks, and furniture. Pop. 104,000.

Su-chow. See SOOCHOW.

Sucre (*sou'krâ*), nominal cap., Bolivia, S. America, situated on watershed between basins of Rs. Amazon and La Plata; cathedral, univ. of San Xavier. Pop. 34,000.

Sudan (*sou-dân*) ('land of the Blacks'), vast region in Africa with no strictly defined limits, but roughly bounded N. by Egypt and Sahara, W. by Atlantic Ocean, S. by Guinea Lands, Congo Basin, and Uganda, E. by Abyssinia and Red Sea. There is a great diversity of physical features, but Sudan is chiefly an elevated region, mountainous in parts, with grassy, steppe-like plains and considerable forest-land; region is watered by several great rivers, including Senegal, Niger, and Nile; in centre is Lake Chad; climate hot and unhealthy. Chief occupations are ostrich farming, sheep, goat, and camel rearing, cultivation of cotton, durra, barley, wheat, and dates;

exports include cotton, gum, rubber, ivory, ostrich feathers, and dates.

Anglo-Egyptian Sudan, situated in Upper Nile valley, is bounded on s. by Egypt, on e. by Red Sea, Eritrea, and Abyssinia, on s. by Uganda Protectorate and Belgian Congo, and on w. by French Equatorial Africa. In s. between the Red Sea and R. Nile is Nubian Desert, a bare, desolate tract with little vegetation. Sudan consists chiefly of grassy plains, and the s. is a swampy, unhealthy dist. The only fertile part is in neighbourhood of R. Nile and its tribs. and in oases. Forests yield rubber, gum, ivory, and much valuable timber; iron, gold, copper, and lignite are produced; cattle raising important; cotton successfully cultivated under irrigation, and in parts where rain is sufficient. Chief tns. are Khartoum (cap.), Omdurman, Halfa, El Obeid, Suakin, Port Sudan. Area, 1,008,100 sq. m.; pop. 5,484,000.

French Sudan, colony of French W. Africa, mainly consisting of plateau land, and including valley of Upper Senegal R. and more than half of R. Niger basin; many cattle reared, and millet, maize, rice, cotton are produced. Chief tns. are Bamako (cap.), Kayes, and Timbuktu. Area, 360,331 sq. m.; pop. 2,633,000.

Sudbury. (1) Munic. bor., Suffolk, England, on R. Stour, 16 m. s. of Bury St. Edmunds; silks, velvets, coco-fibrematting; horsehair weaving. Pop. 7,000. (2) Tn., Ontario, Canada, c. 150 m. e. of Sault Ste. Marie; great mining and smelting tn. producing nickel and copper. Pop. 9,000.

Sudetes Mts. (*soo-dé'tes*), mt. system, central Europe, separating Prussian Silesia from Czechoslovakia; include Riesengebirge; at s.e. extremity is Moravian Gate; chief peak Schneekoppe (5,260 ft.).

Sueca (*soo-á'ka*), tn., E. Spain, 19 m. s. of Valencia; trade in fruit and grain. Pop. 18,000.

Suez (*soo-é's*), port, Egypt, on Gulf of Suez, at s. terminus of Suez Canal. Pop. 41,000.

Suez, GULF OF, w. arm of Red Sea, extends 190 m. to n.w.; width, c. 30 m.; connected with Mediterranean Sea by Suez Canal.

Suez Canal, ship canal between Mediterranean Sea and Red Sea, from Port Said to Suez, constructed by Ferdinand de Lesseps (1859-69); subsequently enlarged. Canal is 101 m. long; runs through Lakes Menzala, Balah, Timsah, and Bitter Lakes; depth, c. 32 ft.; greatest width, c. 350 ft.; time of passage, 15-18 hours. There is a railway swing bridge across the canal at El Qantara. The canal is of the greatest value to commerce as it provides a short route to the East. More than half the shipping passing through the canal is British.

Suffolk, coast co., E. England; bounded n. by Norfolk, e. by North Sea, s. by Essex, w. by Cambridgeshire; surface generally level or slightly undulating, with low ridge of hills in n.w.; coasts low and much encroached on by sea; drained by Rs. Little Ouse, Waveney, Blythe, Alde, Orwell, and Stour. County is chiefly of chalk formation; principal industry is agriculture; there are important fisheries on coast; malting is carried on; manufactures include chemical manures, agricultural implements. Co. tn., Ipswich. Area, 1,482 sq. m.; pop. 401,100.

Suhl (*sool*), tn., Saxony, Prussia, on R. Lauter, on s. side of Thuringian Forest, 13 m. E.N.E. of Meiningen; long famous for manufacture of fire-arms; iron and machine works, potteries, tanneries. Pop. 16,000.

Sui, tn., Szechwan, China, on R. Yangtze Kiang; wax; exports cotton goods; large trade with Yunnan. Pop. 125,000.

Suir (*shoor*), riv., I.F.S.; rises in Tipperary and enters Waterford Harbour. Chief tns. on banks, Clonmel, Carrick-on-Suir, Waterford. Length, c. 100 m.

Sukkur, tn., Sind, Bombay, India, on R. Indus, 25 m. s.e. of Shikarpur; trade in silk, cotton, wool, opium,

piece goods. An irrigation dam is being constructed across the R. Indus here. Pop. 43,000.

Sula Islands, chain of islands, Dutch E. Indies; e. of Celebes; mountainous and forested; rice, maize, tobacco. Pop. 16,000.

Sulaiman Mountains (*soo-lā-mān'*) extend along the n.w. frontier of India for 350 m. Khyber Pass is most important route through mts. Highest point, Takht-i-Sulaiman ('throne of Solomon'), 11,070.

Sulina (*soo-lē'na*), free port, Romania, at mouth of Sulina branch of R. Danube; grain transshipping centre. Pop. 8,000.

Sulmo'na, tn., Aquila, Italy, 80 m. e. of Rome; manufactures paper; copper factories; noted wine. Birth-place of Ovid. Pop. 19,000.

Sulu. See **Holo**.

Sumatra (*soo-mā'trā*), largest isl. of Malay Archipelago, one of Dutch E. Indies; separated from Malay Peninsula by Strait of Malacca, and from Java by Sunda Strait; volcanic mts. run lengthwise along s.w. (Mt. Korinchi, 12,400 ft.); in n.e. are marshy and sandy plains; watered by Rs. Musi, Jambi, Indragiri, and other streams, all flowing e.; there are many small islands off the coasts. Climate is hot, but healthy, except in lower districts; rainfall heavy. Dense forests of teak, oak, and other timber trees; produces rice, maize, sugar, coffee, spices, sago, coconuts, tobacco, betel, gutta-percha, gums; minerals include coal, gold, silver, petroleum, iron, lead, saltpetre. Principal ports, Padang, Palembang, Benkulen, Achin. Area, 163,138 sq. m.; pop. 6,164,000.

Sumba (*soom'bā*), one of Lesser Sunda Islands, Dutch E. Indies; soil fertile; rice, maize, tobacco; sandalwood. Area, 4,600 sq. m.; pop. 124,000.

Sumbawa (*soom-bā'wā*), one of Lesser Sunda Islands, Dutch E. Indies; mountainous, volcanic, fertile; rice, cotton, coffee, tobacco, vegetables are grown; live-stock rearing. Area, 5,240 sq. m.; pop. 246,000.

Sumy (*soo'mē*), town, Ukraine, U.S.S.R., on R. Isel, 84 m. n.w. of Kharkov; sugar refineries, breweries, textile and leather factories; agricultural implements. Pop. 40,000.

Sunbury, tn., Pennsylvania, U.S.A., on R. Susquehanna, 30 m. s. of Williamsport; manufactures textiles, flour, furniture, machinery. Pop. 16,000.

Sunbury-on-Thames, urb. dist., Middlesex, England, part of Greater London; residential dist.; fishing resort. Pop. 13,300.

Sun'da Islands, collective name for group of islands, Malay Archipelago, divided into Greater Sunda Islands (Borneo, Sumatra, Java, Celebes) and Lesser Sunda Islands (Bali, Lombok, Sumbawa, and others).

Sundarbans, coast land of R. Ganges delta, India; largely forest and swamp intersected by numerous distributaries of Ganges-Brahmaputra; rice in n. portion; s. part is jungle, haunt of tigers and crocodiles. Area, 7,500 sq. m.

Sunderland, co. bor. and port, Durham, England, at mouth of R. Wear; includes Bishopwearmouth and Monkwearmouth; large trade in coal; shipbuilding centre; engineering, anchor, and chain-cable works, roperies, glass and paper works; imports timber. Pop. 185,900.

Sundsvall (*soonds'vāl*), port, Sweden, on Gulf of Bothnia; sawmills and shipbuilding yards; exports timber. Pop. 18,000.

Sungari (*soon-gā-rē*), riv., Manchuria; trib. of R. Amur; navigable for light craft to Kirin; teems with sturgeon, trout, and salmon; ice-bound for five months. Length, 800 m.

Sun'ningdale, par. and vil., Berks, England, 6 m. s. of Windsor; golfing centre. Pop. (par.) 2,000.

Sun'ninghill, par. and vil., s.e. Berks, England; residential; popular wat.-pl. in 18th cent. Pop. (par.) 5,800.

Superior. (1) **LAKE**, largest freshwater lake in world, and most w. of

the five Great Lakes of N. America; between U.S.A. and Canada; length, 400 m.; breadth, 160 m.; area, 32,000 sq. m.; elevation above sea-level, 600 ft.; discharges by St. Mary's R. into Lake Huron. Surrounding region is extremely rich in iron and copper. (2) Port, Wisconsin, U.S.A., at w. end of L. Superior; shipbuilding yards; flour and lumber mills; manufactures railway stock, furniture, wooden articles; market for cereals. Pop. 36,000.

Suq ash Shuyukh, tn., Iraq, on R. Euphrates, 85 m. N.W. of Basra; surrounding region fertile; manufactures Arab woollen cloaks; boat building. Pop. c. 12,000.

Surabaya (*sou-ra-bi'a*). (1) Residency, E. Java, Dutch E. Indies; fertile, well-watered plain; sugar, tobacco, coffee, rice, and other food crops; cattle rearing; oilfields. Area, 3,682 sq. m.; pop. 2,556,000. (2) Port in above; government dockyards and arsenals; exports coffee, rice, cotton, sugar, tobacco, tapioca. Pop. 250,000.

Surakar'ta. (1) Residency, central Java; hilly, with fertile valley of R. Solo; tobacco, coffee, sugar-cane extensively grown. Area, 2,500 sq. m.; pop. 2,257,000. (2) Cap. of above; commercial centre; pop. 130,000.

Surat. (1) Dist., Bombay, India; alluvial plain yielding luxuriant crops; rice, cotton, wheat. Area, 1,651 sq. m.; pop. 674,000. (2) Port, cap. of above, on R. Tapti; manufactures cotton and silk, gold and silver wire, sandalwood, and exports agricultural produce and cotton. Was first English settlement in India. Pop. 117,000.

Surbiton, residential suburb of Kingston-on-Thames, Surrey, England; part of Greater London; headquarters of rowing and sailing clubs. Pop. 29,400.

Surinam. See under **GUIANA** (*Dutch Guiana*).

Sur'ey, inland co., s. England; bounded by Middlesex, Kent, Sussex, Hants, Berks, and Bucks. Surface is generally undulating, with well-

wooded parks and large commons; crossed by N. Downs; drained by Rs. Thames, Wey, Mole, and other streams. Agriculture is important; wheat, oats, barley, and pulse grown; hops, vegetables and medicinal herbs; market gardening; live-stock raised. Co. tn., Guildford. Area, 721 sq. m.; pop. 1,180,800.

Sus (*soos*), prov., Morocco, bordering Atlantic Ocean; mountainous; drained by R. Sus; produces saltpetre; believed to be rich in copper. Area, c. 8,000 sq. m.; pop. c. 400,000.

Susa. See **SOTSSR**.

Susquehanna (*sus-kwe-han'a*), riv., E. U.S.A.; rises in two main branches which unite at Sunbury, Pennsylvania, and enters Chesapeake Bay; length, 422 m.

Sus'sex, mar. co., s. England; bounded by Hants, Surrey, and Kent; crossed by S. Downs, which terminate at Beachy Head; the Weald, formerly forested, occupies interior, and in N.E. are Forest Hills; drained by Rs. Rother, Brede, Ouse, Adur, Arun, and other streams. Chief industry is agriculture; principal crops, wheat, barley, pulse, potatoes, hops; excellent pasturage in marshland of s.e. and on Downs; great numbers of cattle, sheep, and horses reared; fruits and vegetables extensively grown for London markets. Coast fisheries are valuable. Manufactures include paper, bricks, pottery, cement, gunpowder. Co. tn., Lewes. Area, 1,457 sq. m.; pop. 770,100.

Suth'erland, mar. co., N. Scotland, extends from Atlantic Ocean to Moray Firth; bounded N.E. by Caithness, s. by Ross and Cromarty; surface mountainous with wide moorlands and some fertile valleys in n.; highest point, Ben More Assynt (3,273 ft.); drained by Rs. Oyckell, Brora, Helmsdale, and other streams; has numerous lakes, including Lochs Assynt and Shin. Little agriculture; sheep are extensively reared; salmon, herring, and other fisheries; a considerable area consists of deer forests and grouse moors. Small coalfield at

Brora. Co. tn., Dornoch. Area, 2,028 sq. m.; pop. 16,100.

Sut'lej, riv., Punjab, India, trib. of R. Indus; rises in Tibet and flows generally s.w.; joins R. Indus at Mithankot; navigable for steamers to Ferozepur; supplies several systems of irrigation works; length, 900 m.

Sutton, LONG, urb. dist., s.e. Lincolnshire, England, 11 m. w. of King's Lynn; mkt. tn. Pop. 2,900.

Sut'ton and Cheam, urb. dist., Surrey, England, 4 m. s.w. of Croydon; residential dist. Pop. 46,500.

Sut'ton Bridge, urb. dist., Lincs, England, on R. Nen, 7 m. n. of Wisbech; port. Pop. 2,800.

Sut'ton Cold'field, munic. bor., Warwickshire, England; residential suburb of Birmingham; hardware. Pop. 29,900.

Sut'ton-in-Ash'field, tn., Notts, England, 13 m. n. of Nottingham; manufactures hosiery and cotton thread; collieries in vicinity. Pop. 25,200.

Sut'ton-on-Sea, wat.-pl., Lincolnshire, England, united with Mablethorpe; summer resort.

Suwalki (*sou-wál'kě*). (1) Prov., s.w. Lithuania; part of former Russian prov., now divided between Lithuania and Poland. Agriculture, timber felling, and weaving of woollen and linen cloth are the chief industries. Area, 4,800 sq. m.; pop. 667,000. (2) Tn., Poland, near Lithuanian frontier; timber, grain, and woollens. Pop. 24,000.

Svalbard. See SPITSBERGEN.

Svend'borg, port, on isl. of Fünen, Denmark; exports agricultural produce; manufactures tobacco; weaving, ironfounding, and brewing. Pop. 14,000.

Sverdlovsk', formerly EKATERINBURG, tn., Ural Area, Russia, on e. slopes of Ural Mts.; univ.; centre of important mining district; coal, platinum, copper, gold; manufactures linen, machinery; jewel cutting. Pop. 136,000.

Svishtov (*shish-tov'*), formerly SISTOVA, tn., Bulgaria, on R. Danube;

centre of grain trade; exports wine. Pop. 12,000.

Swabia (*swā'bē-a*), or SUABIA (Ger. *Schwaben*), anc. duchy (917-1268), s.w. Germany; devastated in Thirty Years' War (1618-48); broken up by Napoleon (1805); much of terr. now administrative dist. of Bavaria, stretching from Switzerland to beyond R. Danube. Chief tn., Augsburg.

Swad'lineote, urb. dist., Derbyshire, England, 5 m. s.e. of Burton-on-Trent; coal mines and potteries. Pop. 20,300.

Swaff'ham, tn., Norfolk, England, 15 m. s.e. of King's Lynn; ironfounding. Pop. 2,800.

Swak'opmund, port, S.W. Africa, 30 m. n. of Walvis Bay; trading and mission station; wat.-pl. Pop. 1,800.

Swal'well, vil., Durham, England, 5 m. s.w. of Newcastle; coal mines and steel works. Pop. 4,600.

Swan'age, wat.-pl. and port, Isle of Purbeck, Dorset, England; exports Purbeck stone. Pop. 6,300.

Swan'ley, vil., Kent, England, 15 m. s.e. of London; school of gardening. Pop. (dist.) 3,000.

Swans'combe, urb. dist., Kent, England, on R. Thames, 2 m. w. of Gravesend; cement. Pop. 8,500.

Swans'ea, co. bor. and port, Glamorganshire, Wales, at mouth of R. Tawe; chief seat of tinplate manufacture; one of most important copper-smelting and refining towns in world; extensive coal mines; manufacture of iron and steel, zinc, alkali, arsenic, machinery. Huge oil refineries. Extensive docks and fine harbour. Pop. 164,800.

Swat, region, N.W. Frontier Prov., India, consisting of upper valley of Swat R., which flows s. for about 400 m. to join R. Kabul. Pop. (mainly Pathans) c. 170,000.

Swatow', port, Kwang-tung, s. China, at mouth of R. Han; manufactures bean cake; wolfram mining; exports sugar, paper, grass-cloth, china ware, fruits, vegetable oil, tea, and tobacco. Pop. 93,000.

Swaziland, terr., Brit. S. Africa,

between Transvaal and Portuguese E. Africa; w. surface is a grass-covered plateau; centre is fertile rolling downs; climate healthy; low bush lands malarious; chief crops are maize, millet, tobacco, beans; fruit (especially oranges); cotton; cattle and sheep raised; minerals include gold, tin. Administered by Resident Commissioner subject to High Commissioner for S. Africa. Mbabane is administrative centre. Area, 6,704 sq. m.; pop. 113,000 (including 2,200 whites).

Sweden, kingdom, n.w. Europe; occupies e. and larger part of Scandinavia; bounded e. by the Baltic Sea, Gulf of Bothnia, and Finland; n. and w. by Norway. On the whole forms a great plain, very slightly elevated above sea-level. Only n. part along Norwegian border is mountainous; has innumerable islands fringing the shores and affording protection against winds and waves. Land is exceedingly well watered. Principal rvs. are Tornio, Kalix, Lule, Pite, Ume, Angerman, Ljusna, and Mottala, falling into Baltic; and Göta and Klar into Kattegat. Most important canal is Göta Canal, which, by means of Göta R. and lakes Vener and Vetter, unites North Sea with Baltic. Lakes cover 8.3 per cent. of total area. Climate generally equable, but more extreme than that of Norway; Gulf of Bothnia and Baltic Sea ice-bound in winter. Coniferous forests cover the greater part of the country; in n. flora is arctic, and reindeer is nomadic. Agriculture is important; greater part of land owned by small proprietors. Barley, oats, sugar-beet, fodder roots, and hay are largely grown; potato flourishes everywhere. Large quantities of butter, hides, wool, bacon, and live-stock are exported, as are timber, wrought and unwrought, and wood pulp. Fisheries, esp. herring, are important; salmon is principal river fish. Mining is most productive industry; excellent iron ore in the central provinces, and at Gällivara in the n. Woollen and cotton

goods, electrical goods, porcelain, brandy, sugar, machinery are principal manufactured products. Excellent harbours abound. Principal exports are timber, wood pulp, metals, and animal products. The population is most dense in the s., where all the largest tns. are. Cap. Stockholm. Area, 173,156 sq. m.; pop. 6,105,000.

Swilly Lough ('lake of shadows'), inlet, Donegal, I.F.S.; length, about 30 m.; largest battleships can anchor in Buncrana Bay.

Swindon, munic. bor., Wilts, England, 77 m. w. of London; has extensive locomotive and carriage works; limestone quarrying in vicinity; cloth mills. Pop. 62,400.

Swinemünde (*swé-ne-moon-da*), tn. and wat.-pl., Pomerania, Prussia, on isl. of Usedom, and on R. Swine, 35 m. n.w. of Stettin, fairway to which is kept open in winter by icebreakers. Pop. 18,000.

Swinton, tn., W. Riding, Yorks, England, 10½ m. n.e. of Sheffield; has railway works; bottles, glass, and pottery. Pop. 13,800.

Swinton and Pen'dlebury, urb. dist., Lancs, England, 4 m. n.w. of Manchester; has cotton mills and coal mines. Pop. 32,800.

Switzerland, rep., central Europe; bounded n. by Germany, e. by Austria, s. by Italy, and w. by France; s. part consists of ranges of Alps including Pennine Alps, with Monte Rosa (15,217 ft.) and the Matterhorn (14,705 ft.), both on Italian boundary, Lepontine Alps, and Rhaetian Alps; in centre are Bernese Alps (Oberland), with Finsteraarhorn, Aletschhorn, and Jungfrau, and Glarus Alps, separated by plateau from Jura Mts., which form n.w. frontier. Numerous glaciers. Principal drainage is by Rs. Rhine and Rhone; R. Aar receives Alpine streams which traverse lakes Neuchâtel, Lucerne, Zurich, etc., and joins R. Rhine, which flows through L. Constance (partly in Germany); R. Rhone leaves Switzerland through L. Geneva (partly in France); R. Ticino (trib. of R. Po) flows through L. Mag-

giore (mainly in Italy); and R. Inn (trib. of R. Danube) flows through Engadine. Many important passes, esp. Simplon, Lötschen, and St. Gotthard, which have been tunnelled and carry railway routes to Italy. Tourist traffic gives employment to many of the inhabitants, both in summer and for winter sports. Country known as the 'Playground of Europe.' About one quarter of the country is forested. The land is pastoral rather than agricultural; cattle, pigs, goats, and sheep are reared, esp. in plateau region. Most of the food crops are imported. Vineyards are on the decrease. Large water-power resources. Of manufactures the chief are textiles, especially silk and cotton. Watch and clock making carried on for centuries. The chief manufactured articles exported are cheese, condensed milk, chocolate, and other food products; silk and cotton goods, including embroidery; and clocks and watches, machinery, shoes, and chemicals. German is spoken by 70 per cent. of the inhabitants, but French is the chief language of the five s.w. cantons, and Italian in Ticino. Berne is the cap. Area, 15,940 sq. m.; pop. 4,018,000.

Swords, par. and tn., co. Dublin, L.F.S., 8 m. n. of Dublin; has round tower and ruins of an abbey and a castle. Pop. (par.) 1,900.

Syd'enhams, residential dist., London, England, partly within the metropolitan bor. of Lewisham. Here is the Crystal Palace. Pop. 32,000.

Syd'ney. (1) Cap. of New South Wales, Australia, on s. shore of Port Jackson, one of finest natural harbours in world. Quays and wharves are over 23 m. in extent and can accommodate vessels of largest tonnage. City is laid out with wide streets and fine public buildings, including governor-general's residence, univ., mint, and two cathedrals; has fine parks and botanical gardens. Is the main commercial and industrial centre of New South Wales, and the most important port in Australia. Great wool sales. Among its many industrial es-

tablishments are foundries, engineering and electrical works, and cloth mills. *Greater Sydney* includes the cap. Sydney, and forty surrounding municipalities. Sydney Harbour Bridge connects Sydney with N. Sydney. Area, 181 sq. m.; pop. 1,239,000. (2) Port and mining tn., Cape Breton I., Nova Scotia, Canada; iron and steel works; cement, coke, chemicals. Pop. 23,000.

Syd'ney Mines, tn., Nova Scotia, Canada, on Cape Breton I., 8 m. n. of Sydney; coal mining. Pop. 7,000.

Sylhet. (1) Dist., s. Assam, India; largely plain in lower valley of R. Surma; hilly towards s.; very well watered; most important crop is tea. Area, 5,680 sq. m.; pop. 2,541,000. (2) Chief tn. of above, on R. Surma; weaving, oil-pressing, bamboo work. Pop. 17,000.

Sylt, largest German isl., N. Frisian group, North Sea; off w. coast of Jutland; holiday resort. Length, 23 m. Area, 38 sq. m.; pop. 4,500.

Syra. See SYROS.

Syr'acuse. (1) Prov., E. Sicily; hilly, with fertile valleys; fruit. Area, 852 sq. m.; pop. 312,000. (2) Cap. of above, on Mediterranean Sea; chemicals and pottery; exports fruit, wine, oil. Anc. city, founded 733 B.C., was chief Greek city in w. Extensive and interesting ruins of anc. tn. Pop. 56,000. (3) Tn., New York, U.S.A., on Lake Onondaga, 76 m. E. of Rochester; important rly. and canal centre; univ.; brine springs, salt production formerly important; typewriters, machinery, clothing. Pop. 207,000.

Syr-Daria. See STR DARYA.

Sy'ria, state, Asia, under French mandate; bounded n. by Asia Minor, E. by Iraq, s. by Transjordan and Palestine, w. by Mediterranean Sea. Surface elevated; Lebanon and Anti-Lebanon Mts. extend along Mediterranean coast; E. of these a plateau slopes gradually to E. desert; in s. is fertile Hauran; chief riv. is Orontes. Climate is Mediterranean. Cereals, linseed, grapes, tobacco, and olives are grown; lentils and beans; sheep and

goats reared; exports silk, wool, cereals, fruit, olive oil. From Aleppo the 'Pilgrims' rly. runs s. through Damascus, with branches to the coast at Tripoli and Beirut. Cap. Damascus. Area, c. 60,000 sq. m.; pop. 1,700,000.

Sy'ros, isl. of Cyclades group, Greece; mountainous; exports sponges, tobacco, citrons. Chief tn., Hermoupolis. Area, 42 sq. m.; pop. 34,000.

Sys'ton, par. and vil., Leicestershire, England, 5 m. N.N.E. of Leicester; boot and shoe factories. Pop. (par.) 3,200.

Syzran (*sis-rân*'), tn., Ulianovsk prov., Russia, on R. Volga, 17 m. w. of Samara; tanneries, iron foundries, distilleries, breweries, flour mills, and sawmills. Pop. 48,000.

Szabadka. See SUBOTICA.

Szatmar-Nemeti. See SATUL-MARE.

Szechwan ('four rivers'), largest prov. of China Proper, in centre of w.; surface mountainous, reaching extreme height of c. 10,000 ft.; drained by R. Yangtze and its tribs.; soil fertile; produces cereals, oil,

sugar, tea, cotton, opium, tobacco, oranges, white wax, silk; minerals include coal, iron, salt, gold, silver, lead. Cap. Chengtu. Area, 218,480 sq. m.; pop. c. 50,000,000.

Szeged (*seg'ed*), tn., Hungary, at junction of Rs. Tisa and Maros; univ.; manufactures soap, cloth, leather; breweries, distilleries; important trade centre. Pop. 125,000.

Szek'esfehervar, tn., Hungary, 35 m. s.w. of Budapest; manufactures leather and shoes; trade in horses, wine, and fruit. Pop. 39,000.

Szenes (*sen'tesh*), tn., Hungary, on branch of R. Tisa, 30 m. N. by E. of Szeged; protected against the frequent inundations of R. Tisa by huge stone dykes. Pop. 32,000.

Szolnok (*sol'noš*), tn., w. Hungary, on R. Tisa, 58 m. E.S.E. of Budapest; linen thread and machinery; trade in timber, salt, and tobacco. Pop. 32,500.

Szom'bathely, tn., Hungary, 31 m. s. of Sopron; centre of wine-producing and agricultural country; textiles, agricultural implements, flour, and lumber. Pop. 35,000.

T

Taal (*tā-āl*'), tn., Luzon I., Philippines, 50 m. s. of Manila; rice and sugar mills; exports sulphur. Pop. 21,500.

Tabaco (*tā-bā'ko*), tn., Luzon I., Philippines, on s.e. coast; trades with Manila; hemp. Pop. 25,000.

Tabas'co, state, Mexico, on s. of Bay of Campeche; low, flat, and forested; no rlys. Cap. Villa Hermosa. Area, 10,374 sq. m.; pop. 210,500.

Table Mountain, mt., Cape Prov., S. Africa, overlooking Cape Town and Table Bay; named from flat summit; alt. 3,550 ft.

Tabor (*tā'bor*), tn., Bohemia, Czechoslovakia, 65 m. by rail s. of Prague; tobacco, beer, flour produced; partly

surrounded with walls built by Hussites (1420). Pop. 13,000.

Tabo'ra, tn., Tanganyika Terr., E. Africa; junction of rlys. from Dar-es-Salaam to Ls. Tanganyika and Victoria; aerodrome; founded c. 1820 for trade in slaves and ivory. Pop. c. 25,000.

Tabriz (*tā-brēz*'), tn., cap., Azerbaijan, N.W. Persia, 40 m. E. of L. Urmia; alt. 4,400 ft.; mineral springs in vicinity; exports dried fruit, cotton, carpets; Blue Mosque, and citadel containing famous tower built by Greeks; several times devastated by earthquakes. Pop. 180,000.

Tac'na. (1) Prov., Peru, S. America, bordering Chile; transferred from Chile by treaty of 1929; largely

desert; nitrate of soda, silver, copper; subject to earthquakes. Area, 12,600 sq. m.; pop. 60,000. (2) Cap. of above, on oasis; rly. to Arica. Pop. c. 14,500.

Taco'ma, city, Washington, U.S.A., 25 m. s. by w. of Seattle; important seaport of Pacific coast; lumber and timber manufactures, copper smelting, flour mills. Pop. 107,000.

Tad'caster, tn., W. Riding, Yorks, England, 9 m. s.w. of York; breweries, limestone quarries; Roman remains discovered; divided into E. and W. Tadcaster. Pop. (E.) 1,500, (W.) 2,000.

Tadzhik Republic (*tā-zhēk*), rep., U.S.S.R.; in central Asia, n. of Afghanistan; mountainous (Mt. Kaufmann, 23,386 ft.); chief riv., Oxus; under irrigation, wheat, barley, cotton, and fruits are raised; coal, iron; peasant industries. Cap. Dushambe. Area, 52,110 sq. m.; pop. c. 824,000.

Taflelt (*tā-fē'tēl*), oasis, Morocco, Africa, in n.w. Sahara, c. 200 m. s. of Fez; caravan centre; noted for dates and leather. Pop. 150,000.

Taganrog', port, N. Caucasian Area, Russia, on Sea of Azov, 35 m. w. of Rostov-on-Don; tanneries, tobacco factories, fisheries; exports grain. Pop. 86,500.

Ta'gus, longest riv., Iberian peninsula; rises in Sierra de Albarracín; flows n.w. and w. in narrow and generally deep valley across Meseta into broad lake at Lisbon; navigable by steamers to Santarém; estuary an important European harbour. Length, 265 m.

Tahiti (*tā-hē'tē*), formerly OTAHETE, largest of Society Islands, Pacific Ocean; belongs to France; of volcanic formation; surface mountainous, reaching 7,340 ft.; surrounded by coral reefs; fertile along coast; produces bread-fruit, oranges, bananas, and other fruits, sugar, coffee, cocoa, vanilla, cotton; exports copra, pearl-shell, vanilla, coconuts, phosphates. Native inhabitants belong to Polynesian group. Chief tn., Papeete. Area, 600 sq. m.; pop. 9,000.

Tain, port and royal burgh, Ross and Cromarty, Scotland, on s. shore of Dornoch Firth, 44 m. n. of Inverness; distillery, woollen mills; church of St. Duthus (1471). Pop. 1,400.

Taiwan. See FORMOSA.

Tai-Yuan (*tā-yoo-ān'*), cap., Shansi, China; coalfields in vicinity; meteorological station. Pop. c. 80,000.

Takamat'su, tn., Japan, n. coast of Shikoku I., 80 m. w.s.w. of Osaka; ruined castle. Pop. 72,000.

Tak'la Makan', w. section of Gobi Desert, Sinkiang, China; between Kunlun Mts. and Tarim R.; largely covered with sand dunes. Area, 115,000 sq. m.

Takorad'i, port, Gold Coast, W. Africa; w. of Sekondi; deep water harbour, opened 1928, is the only one between Sierra Leone and Nigeria; exports cocoa, gold, manganese, diamonds.

Taku (*tā-koo'*), fortified port, Hopeh, China, on Pei-ho; dockyard; taken by European Allies (1900).

Talavera, OF TALAVERA DE LA REINA (*tā-lā-vā'rā*), tn., Toledo, Spain, on R. Tagus, 84 m. by rail s.w. of Madrid; cloth, leather, soap; Roman and Moorish remains; scene of battle in Peninsular War (1809). Pop. 13,500.

Tal'ca, tn., cap. of prov. of same name, Chile, 155 m. by rail s. of Santiago; trades in cereals and wine; partly destroyed by earthquake (1928). Pop. 36,000. Area (prov.) 5,622 sq. m.; pop. 228,000.

Talcahuan'o, port, Concepción, Chile; exports grain; naval station. Pop. 22,500.

Talé-Sap. See TONLE-SAP.

Talgarth', mkt. tn. and par., Brecknock, Wales, 7 m. n.e. of Brecon; contains anc. Brit. relics. Pop. (par.) 1,900.

Talke (*tawk*), OF TALK-O'-TH'-HILL, eccles. dist. and vil., Staffs, England, 5 m. n. of Newcastle-under-Lyme; coal mining. Pop. (dist.) 6,200.

Tallinn', formerly REVEL, port and cap., Estonia, s. Gulf of Finland; shipbuilding; textiles, cement, timber. Pop. 132,000.

Ta'mar, riv., Cornwall and Devon, England; rises in N.E. Cornwall and flows s. to Plymouth Sound; estuary called the Hamoaze; navigable to Launceston. Length, 60 m.

Tamatave (*tā-mā-tā'vā*), port, Madagascar; meat-preserving factories; c. half of total foreign trade passes through it; exports gold dust, hides, raffia. Pop. 15,000.

Tamaulipas (*tā-mou-lē'pās*), state, N.E. Mexico, on Gulf of Mexico; surface mountainous in interior, lagoons on coast; cereals, sugar, coffee; cattle-rearing; hides and live-stock exported; copper, asphalt, petroleum obtained. Cap. Ciudad Victoria. Area, 30,831 sq. m.; pop. 287,000.

Tambov. (1) Prov., European Russia; surface undulating; drained by Don and Oka rivs.; cereals, hemp, flax, sugar-beet grown; horses and cattle reared; minerals include iron, coal, gypsum; chief export, grain. Area, 18,700 sq. m.; pop. 2,721,500. (2) Cap. of above, on R. Tsna, 180 m. S.E. of Tula; manufactures woollens, soap, candles, tobacco, tiles. Pop. 76,500.

Tam'perfors. See TAMPERE.

Tam'pa, city, w. Florida, U.S.A., on Tampa Bay; winter resort; exports cigars and phosphates. Pop. 101,000.

Tam'pera, formerly TAMMERFORS, tn., Finland, 100 m. N.W. of Helsinki; rly. jn.; textiles, leather, paper. Pop. 52,000.

Tampico (*tām-pē'ko*), port, E. coast of Mexico, on R. Panuco; outlet for oilfields; sugar, maize, fruits, fibres. Pop. 76,000.

Tam'worth. (1) Tn., Staffs, England, at junction of Tame and Anker rivs., 6½ m. S.E. of Lichfield; castle was residence of kings of Mercia; textile smallwares; coal and fireclay mines. Pop. 7,500. (2) Tn., New S. Wales, Australia, c. 150 m. N.W. of Newcastle; flour. Pop. 7,500.

Tana. (1) Or DEMBEA. Lake, Abyssinia; drained by Blue Nile riv.; alt. 5,700 ft.; area, 1,100 sq. m. (2) Riv., Kenya Colony, Africa; enters Indian Ocean c. 100 m. N. of

Mombasa; length, 500 m.; navigable for 150 m. from sea.

Tananarivo. See ANTANANARIVO.

Tan'feld, urb. dist., Durham, England, 7 m. S.W. of Gateshead; coal mining, lime quarrying; brick and tile works. Pop. 9,200.

Tan'ga, port, Tanganyika Terr., Africa; terminus of Usambara Rly.; exports sisal and coffee. Pop. 11,000.

Tanganyika (*tūn-gā-nyē'ka*), freshwater lake, central Africa, in rift-valley; length, c. 450 m.; breadth, 30-45 m.; 2,550 ft. above sea-level; N. and W. border on Belgian Congo, S. on Rhodesia, E. on Tanganyika Terr.; discovered by Burton and Speke (1858); explored by Livingstone; on Cape-to-Cairo route; steamer service; rlys. to Albertville on W. shore and Kigoma on E. Area, 12,700 sq. m.

Tanganyika Territory (*tūn-gā-nyē'ka*), terr., E. Africa; former German colony now administered by Britain under mandate; bounded N. by Uganda and Kenya, E. by Indian Ocean, S. by Portuguese E. Africa, Nyasaland, and N. Rhodesia, W. by L. Tanganyika and Belgian Congo; surface a plateau rising to c. 6,000 ft. (Mt. Kilimanjaro, 19,710 ft.); chief rivs. are Kagera, flowing to L. Victoria, Pangani and Rufiji to Indian Ocean; climate of coastal belt tropical, most of plateau unhealthy. Two rainy seasons, March to May, and Nov. to Dec.; areas suitable for Europeans are highlands in N.E. and S.W.; in coastal belt mangroves, coconut-palms, baobabs, tamarinds thrive; forests of acacia, cotton-tree, sycamore, etc., on plateau, also plantations of rubber, sugar, vanilla, cinchona; fibre plants, e.g. sisal, succeed; rice and coffee; cattle, sheep, and goats grazed; among minerals are mica, gold and diamonds; chief exports are grain, coffee, cotton, hides and skins, sisal, ground-nuts, ghee, beeswax, copra. Rlys. from Dar-es-Salaam to Kigoma, with line from Tabora to Mwanza, and from Tanga to Arusha. Cap. Dar-es-Salaam. Area, c. 374,000 sq. m. Pop.

(natives), 4,120,000; (other coloured) 15,000; (Europeans), 3,000.

Tangermunde, tn., Saxony, Prussia, at jn. of R. Tanger with R. Elbe, 43 m. N.E. of Magdeburg; river port; manufactures iron; shipbuilding yards and sugar refineries. Pop. 13,500.

Tangier (*tān-jēr*), port, Morocco, on Strait of Gibraltar, under international control; rly. to Fez; exports oxen, hides, goatskins, eggs, slippers; great mosque and sultan's palace; wireless station; trade suffers from international jealousies. Pop. 60,000.

Tanjore (*tān-jōr*). (1) Dist., Madras, India; drained by R. Cauvery; mostly plain, largely deltaic; very fertile; rice and coconut palms. Area, 3,727 sq. m.; pop. 2,326,500. (2) Cap. of above, on R. Cauvery; literary and religious centre; palace of former rajahs; manufactures jewellery, carpets, silks, inlaid metal work. Pop. 60,000.

Tankersley, tn., Yorks, England, 4½ m. S. of Barnsley; ironworks, collieries, chemical works. Pop. 2,500.

Tan'ta, tn., Gharbia, in Nile delta, Egypt; rly. jn.; famous fairs. Pop. 90,000.

Taormina (*tā-or-mē'nā*), tn., Messina, Sicily; winter resort; ruins of Greek theatre. Pop. 5,000.

Tap'low, par. and vil., Bucks, England, on R. Thames; summer resort; paper making. Pop. (par.) 1,500.

Tapti, riv., w. India; rises in Central Provs., flows w., and enters Gulf of Cambay; length, 450 m.

Tara (*tā-rā*), vil., co. Meath, I.F.S., 6 m. S.E. of Navan; traditional early residence of Irish monarchs.

Tarai', dist. on s. slopes of Himalayas, United Provs., India; covered with marshes and jungle.

Taranto, port, Apulia, Italy, on Gulf of Taranto; castle, cathedral, and museum; naval arsenal; oyster and mussel fisheries; manufactures soap, oil, velvets, and cottons. Pop. 122,000.

Tarapaca, prov., N. Chile, in Atacama Desert; rich nitrate deposits; silver mined. Cap. Iquique. Area, 16,438 sq. m.; pop. 111,000.

Tarare (*tā-rār*), tn., Rhône, France, on R. Turdine, 28 m. N.W. of Lyons; manufactures muslins, silks, and velvets. Pop. 11,000.

Tarascon (*tā-rās-kōn*), tn., Bouches-du-Rhône, France, on R. Rhône; silk spinning and hat manufactures; trade in fruit. Pop. 5,000.

Tarawera (*tā-rā-wā'nā*), MOUNT, dormant volcano, Auckland, North I., New Zealand; slopes steeply to L. Tarawera; eruption destroyed Pink and White Terraces (June 10, 1886); highest peak, 3,770 ft.

Tar'bert, vil., Argyllshire, Scotland, near entrance to Loch Fyne; remains of castle built by Robert the Bruce (1326); herring fisheries. Pop. 2,000.

Tarbes (*tārb*), cap., Hautes-Pyrénées, France, on R. Adour; coarse woollen goods, machinery, leather, paper; breeds horses; race meetings. Pop. 27,000.

Tar'bet, vil., Dumfriesshire, Scotland, on w. shore of L. Lomond; holiday resort.

Tarbol'ton, vil., Ayrshire, Scotland, 7 m. N.E. of Ayr; has associations with Robert Burns. Pop. 1,000.

Târgoviste (*tā-ēr-gos'esh-te*), tn., Romania, 48 m. N.W. of Bucharest; petroleum and salt; military centre; former cap. of Walachia. Pop. 17,000.

Târgu Jiu (*tā-ēr'goo zhyoo*), tn., Romania, in foothills of Transylvanian Alps, 60 m. N.W. of Craiova; timber, coal, petroleum; military centre. Pop. 20,000.

Târgul-Mures (*tā-ēr'goo-moor'esh*), formerly MAROS-VASERHELY, tn., Transylvania, Romania, on R. Muresul; citadel and Gothic church; manufactures sugar, spirits, tobacco. Pop. 23,500.

Tarifa (*tā-rē'fā*), port, Cadiz, Spain, at extreme S.W. of peninsula, on Strait of Gibraltar; Cape Tarifa (Punta Marroquí) is most S. point of Europe; anc. castle and strong fortress on adjacent isl.; tunny and anchovy fishing; oranges, wine, and cereals. Pop. 12,000.

Tarija (*tā-rē'hā*), dep., S. Bolivia, S.

America; largely a fertile plain used for stock raising. Area, 31,567 sq. m.; pop. 140,000. Chief tn., Tarija (pop. 11,000).

Tarim (*tā-rēm*), riv., Central Asia; formed by jn. of Kashgar and Yarkand Rs.; flows between Kunlun and Tien Shan ranges; empties itself into Lop Nor; rich loess country of w. capable of cultivation; flows through Takla Makan Desert; length, c. 1,000 m.; remains of two anc. cities buried in westward-moving sand dunes.

Tarlac, tn., Luzon, Philippine Islands, 70 m. n.w. of Manila; rice, sugar, tobacco, coconuts, and industries connected with these. Pop. 24,000.

Tarn. (1) Riv., s. France; rises in Cévennes, flows n.w. to join R. Garonne between Toulouse and Agen; length, 230 m. (2) Dep., s. France; hilly or mountainous; belongs chiefly to basin of R. Garonne; produces wheat, wine, coal. Cap. Albi. Area, 2,231 sq. m.; pop. 302,000.

Tarn-et-Garonne (*tārn-ā-gā-ron'*), dep., s. France; mostly tableland; watered by Rs. Garonne, Tarn, and Aveyron; cereals, fruit, and vine largely grown; coarse woollens, paper, leather, silk manufactured. Cap. Montauban. Area, 1,440 sq. m.; pop. 164,000.

Tarnopol, tn., s. Poland, on R. Seret, 75 m. e.s.e. of Lwow; brewing, spirit refining, corn milling. Pop. 31,000.

Tarnow (*tār'nuf*), tn., Poland, 46 m. e. of Cracow; cathedral; manufactures agricultural implements and glass. Pop. 36,000.

Tarporley, urb. dist., mkt. tn., Cheshire, England, 10 m. s.e. of Chester; manufactures stockings, leather breeches; headquarters of the Cheshire Hunt. Pop. 2,500.

Tarragona. (1) Prov., Catalonia, N.E. Spain; borders on Mediterranean Sea; mountainous; includes delta of R. Ebro; wine, grain, fruit, timber; lead, marble, copper, silver occur. Area, 2,505 sq. m.; pop. 356,000. (2) Cap. of above, on Mediterranean

coast, 50 m. s.w. of Barcelona; cathedral; Roman remains, including aqueduct; silks, wine; large shipping trade. Pop. 28,000.

Tarrasá, tn., Barcelona, Spain, 15 m. n.w. of Barcelona; fine cloth, serges, tweeds, flannels; Roman remains. Pop. 31,000.

Tarsus, tn., s.e. Asia Minor, on R. Cydnus; chief tn. of Cilicia in anc. times; birthplace of St. Paul. Exports hides, skins, cotton, wool. Pop. 74,000.

Tartar. See TATAR.

Tartu, formerly DORPAT, tn., Estonia, on R. Embach; univ.; printing works, sawmills; trades in timber and flax. Pop. 65,000.

Tashkent, tn., Uzbek, U.S.S.R., on oasis watered by tribs. of Sir Darya; on central Asia rly.; grain, fruit; univ. (1919); manufactures silk, leather, tobacco, cotton; dist. subject to earthquakes. Pop. 324,000.

Tasmania, island state, Australia; bounded n. by Bass Strait, e. and s. by Pacific Ocean, and w. by Indian Ocean; isl. is continuation of E. Australian highlands; plateau, with fertile valleys rising to Cradle Mountain (5,069 ft.); chief rivs., Derwent and Tamar; lakes include Great L.; coast much indented. Climate equable; flora and fauna resemble those of Australia; oats, barley, potatoes; fruit growing; sheep and cattle extensively raised; large area forested; minerals include copper, tin, lead, zinc, silver, coal; exports are wool, timber, fruits, metals. First visited in 1642 by Tasman, who named it Van Diemen's Land. Cap. Hobart. Area, 26,215 sq. m.; pop. 212,000.

Tatar-Pazardjik (*tā-tār'pā-zār-jēk'*), tn., Bulgaria, on Maritsa R., 22 m. w. of Philippopolis; dist. produces tobacco, millet, rice, silk. Pop. 22,000.

Tatar Republic, rep., European Russia; drained by R. Volga and its trib. R. Kama; climate extreme; chief crops rye, oats, maize, potato, sugar-beet, flax, hemp; forests; leather goods, agricultural machinery.

Chief tn., Kazan. Area, 26,000 sq. m.; pop. 2,625,000.

Tatra Mountains, group, central Carpathians, Czechoslovakia and Poland; highest point, Gerlachovka, 8,737 ft.; many tourist resorts.

Tauung-gyi, chief tn., Shan States, Burma, 90 m. s.e. of Mandalay; alt. 5,000 ft.; taken by British (1852); native bazaar. Pop. 17,000.

Taunton (*town'ton*). (1) Co. tn. of Somerset, England, 45 m. s.w. of Bristol; remains of Norman castle; noted for apples and cider; gloves, silk, agricultural implements; scene of Jeffreys' 'Bloody Assize.' Pop. 25,200. (2) City, Massachusetts, U.S.A., 35 m. s. of Boston; silver ware, cotton goods, machinery. Pop. 37,000.

Taunus (*tau'noos*), wooded range of mts., Germany, extending 55 m. e. to w. between Rs. Rhine and Main on s., and R. Lahn on n.; highest point, Grosser Feldberg, 2,887 ft.; vines on lower slopes; contains numerous mineral springs.

Tau'po, largest lake, New Zealand; in centre of North I.; Waikato R. feeds and drains lake; surroundings picturesque; numerous geysers, mud volcanoes, and hot springs in dist.; alt. 1,211 ft. Area, 238 sq. m.

Taurus Mountains (*tau'roos*), ALADAGH, or BULGHAR-DAGH, range of mts., s. Asia Minor; stretches from R. Euphrates to Aegean Sea; chief pass Cilician Gate; pierced by tunnel of Baghdad Rly.; alt. 9,000-10,000 ft. Anti-Taurus is n. extension from near E. end.

Tavira (*tā-vē'ra*), port, s. Portugal, c. 15 m. from Spanish boundary; fisheries; trade in white wine, fruit, locust beans. Pop. 11,000.

Tav'istock, urb. dist., Devonshire, England, on border of Dartmoor, 16 m. n. of Plymouth; remains of 10th cent. Benedictine abbey; copper, lead, and tin mines; extraction of arsenic. Pop. 4,500.

Tavoy, port, Tenasserim, Lower Burma, 30 m. above mouth of Tavoy R.; low lying and subject to floods.

Exports edible birds' nests, pearl, tin, and timber. Pop. 27,500.

Taw, riv., Devonshire, England; rises on Dartmoor, flows n. to Barnstaple Bay.

Tay. (1) Longest river of Scotland; rises as Fillan, trib. of R. Dochart, in Ben Lui; traverses Loch Tay; passes Aberfeldy and Dunkeld to Perth, whence Firth of Tay stretches 24½ m. to North Sea; chief tribs. are Tummel, Earn, and Isla; length, 118 m.; navigable to Perth; salmon fisheries; Firth crossed at Dundee by Tay Bridge (1888), over 2 m. long. (2) Loch, Perthshire, Scotland; stretches 14 m. from Killin n.e. to Kenmore; greatest depth, 308 ft. Area, over 10 sq. m.

Tay'port, or FERRYPORT-ON-CRAIG, port, Fifeshire, Scotland, on Firth of Tay; opposite Broughty Ferry; jute, linen, and sawmills. Pop. 3,200.

Tchernigov. See CHERNIGOV.

Tesaw (*tshef*) (German *Dirschau*), tn., Poland, on R. Vistula, 20 m. s. of Danzig; rly. works; sugar, agricultural implements, cement; timber trade. Pop. 36,000.

Tecuel (*tā-kootch'ē*), tn., Romania, 40 m. n.w. of Galatz; cattle and horses; grain and timber. Pop. 21,000.

Ted'dington, urb. dist., Middlesex, England, on R. Thames; residential tn.; part of Greater London; near by is Bushey Park, with the National Physical Laboratory. Pop. 23,400.

Tees, riv., England; rises in Cross Fell, Cumberland, and flows mainly e., separating Durham from Yorks; forms navigable estuary below Stockton; length, 75 m.

Tegucigalpa (*tā-gōo-thē-gil'pā*), cap. of Honduras; old Aztec city; cathedral and univ.; gold, silver, and marble; bananas. Pop. 40,000.

Tehran (*tā-rān*), cap., Persia; situated on fertile plain; alt. 3,810 ft.; contains royal palace, museum, polytechnic school, and numerous fine mosques; modern part well laid out; caravan centre; carpets and iron goods. Pop. c. 350,000.

Tehri (*tā-rē*), Indian state, Himalayas, India; includes sources of rivs. Ganges and Jumna; forest produce, rice, etc. Cap. Tehri. Area, 4,180 sq. m.; pop. 318,500.

Tehuantepec (*tā-wān-tā-pek*), isthmus, Mexico; between Gulfs of Campeche and Tehuantepec; forests; rich pasture on plateau; rly. across isthmus. (2) Tn., Oaxaca, Mexico, 13 m. from Salina Cruz; cathedral; textiles. Pop. 9,500.

Teign (*tin*), riv., Devonshire, England; rises on Dartmoor; flows 30 m. s.e. and s., falling into Lyme Bay at Teignmouth.

Teignmouth (*tin'muth*), port and seaside resort, s. Devon, England; yacht building, brewing, and fisheries. Pop. 10,000.

Tekrit. See **TIKRIT**.

Tell, hilly region, n.w. Africa, between Mediterranean Sea and Atlas Mts.; stretches through Morocco, Algeria, and Tunisia; fertile, well watered; wheat and barley are chief crops.

Tellicherry, port, Malabar, Madras, India; exp. coffee, cardamoms, coconuts, and sandalwood. Pop. 28,000.

Tembuland. See under **TRANSKEIAN TERRITORY**.

Temesvar. See **TIMISOARA**.

Templemore, mkt. tn., urb. dist., Tipperary, I.F.S., on R. Suir; remains of church and castle of Knights Templars. Pop. 2,200.

Templenew'sam, par., Yorks, England, 4 m. e. of Leeds; Templar residence, original of 'Templestowe' in Scott's *Ivanhoe*; birthplace of Darnley, husband of Mary Queen of Scots. Pop. 3,400.

Tempsford, vil., Beds, England, 4½ m. s.w. of St. Neots; in vicinity are earthworks believed to be Danish. Pop. 470.

Tenasserim. (1) Div., Lower Burma, India, between Siamese mts. and Bay of Bengal. Cap. Moulmein. Area, 35,788 sq. m.; pop. 1,614,000. (2) Tn., in above div., on Tenasserim R.; rice. Pop. 5,000.

Tenbury, mkt. tn., Worcestershire,

England, on R. Teme; centre of hop-growing dist.; fruit, cider; medicinal waters. Pop. 1,950.

Tenby, tn., wat.-pl., Pembrokeshire, Wales, on Carmarthen Bay; fisheries, meteorological station. Pop. 4,100.

Ten'edos, isl., Aegean Sea, near entrance to Dardanelles; exports wine and raisins; ceded to Greece (1920); restored to Turkey (1923).

Tenerife (*ten-er-iff*), largest of Canary Islands; traversed by volcanic mts. with famous Peak (highest point, El Piton, 12,200 ft.); drawn linen, maize, wheat, potatoes, wine, tropical fruit; exports fruit and early vegetables for Brit. markets; tourist and invalid resort. Cap. Santa Cruz. Area, 785 sq. m.; pop. 150,000.

Teng'ynah, tn., Yunnan, China, near Burmese frontier; exports carpets, raw silk; trades with Bhamo (Burma). Pop. c. 20,000.

Tenimber Islands. See **TIMOR-LAUT**.

Tennessee, south central state, U.S.A.; bounded n. by Virginia, Kentucky, w. by Missouri, Arkansas, s. by Mississippi, Alabama, Georgia, e. by N. Carolina; surface mountainous in e., where Appalachians reach 6,636 ft. in Mt. Guyot; in centre is valley of E. Tennessee R., and in w. is plateau of Cumberland Mts.; R. Ohio receives waters of Cumberland and Tennessee rivs. and their tribs., and unites with R. Mississippi, which forms w. boundary. Climate is extreme; flora includes timber and fruit trees; maize, wheat, oats, vegetables, and fruit grown; tobacco and cotton cultivated. Minerals include coal, petroleum, iron, copper, zinc, limestone; principal industries, lumbering, flour milling, manufacture of iron and steel goods, cotton-seed oil and cake, furniture, leather, textiles. Chief tns., Nashville (cap.), Memphis, Knoxville, Chattanooga. Area, 42,022 sq. m.; pop. 2,500,000.

Ten'terden, mkt. tn., Kent, England, 8½ m. n.w. of Rye; formerly counted part of anc. Cinque Port of Rye; hops. Pop. 3,500.

Teplice-Sanov (*tep'litse-shán'of*), formerly TEPLITZ, tn. and wat.-pl., Bohemia, Czechoslovakia, at s. foot of Erzgebirge, 12 m. by rail w.s.w. of Usti; long famed for mineral springs; in largest and richest lignite basin in Bohemia; ironworks; porcelain, glass, textiles, and machinery. Pop. 29,000.

Teral. See TARAI.

Teramo, cap., Abruzzi, Italy, 80 m. s. of Ancona; silk spinning, potteries, straw hat making, tanneries; cathedral. Pop. 28,500.

Terceira (*tär-sä'é-rä*), isl., Azores, Atlantic Ocean. Cap. Angra. Area, 224 sq. m.; pop. 50,000.

Terlizzi (*ter-lét'sä*), tn., Apulia, s. Italy, 20 m. w. of Bari; produces wine and almonds. Pop. 24,000.

Termini Imerese (*ter-mè-nè è-mä-rä'sä*), port, Palermo, Sicily; warm mineral springs; tunny and sardine fisheries. Pop. 20,000.

Termonde, or DENDERMONDE, tn., E. Flanders, Belgium, on R. Schelde, 20 m. s.w. of Antwerp; cotton yarn, lace, woollens; tn. reduced to ruins in Great War. Pop. 10,000.

Terni (*ter'nä*), tn., Umbria, Italy, 50 m. n. of Rome; iron and steel works; manufactures jute; ordnance works; Roman antiquities. Pop. 71,500.

Terrano'va, port, s. coast of Sicily; tunny and sardine fisheries; textiles; exports wine, grain, and sulphur. Pop. 27,000.

Terre Haute (*ter'e höt*), city, Indiana, U.S.A., on R. Wabash, 70 m. s.w. of Indianapolis; coal mining; petroleum; foundry products, glass, paper, flour. Pop. 63,000.

Teruel (*tä-roo-el*). (1) Prov., Spain, s. of lower course of R. Ebro; mountainous; grain, fruits, wine, flax, hemp, timber. Area, 5,720 sq. m.; pop. 260,000. (2) Cap. of above, on R. Guadalaviar; agriculture, forestry, coal mining, weaving; cathedral. Pop. 12,000.

Teschén (*tesh'eri*). (1) Dist., s.e. Silesia, divided between Poland and Czechoslovakia; coal-mining area in

Czechoslovakia. Area, 853 sq. m.; pop. 145,000. (2) Or CIESZYN, tn., Poland, in above; w. suburb is in Czechoslovakia.

Tetbury, mkt. tn., Gloucestershire, England, 8 m. s.e. of Stroud; Elizabethan tn. hall. Pop. 2,200.

Tetschen. See DECIN.

Tet'enhall, urb. dist., Staffs, England; suburb of Wolverhampton; hardware; contains Wolverhampton waterworks. Pop. 5,800.

Tetuan (*tet-oo'an*), fort. seapt., Morocco, on Mediterranean; exports eggs, slippers, beeswax, linseed, almonds, raisins. Pop. 24,000.

Tewkesbury (*täks'ber-e*), mkt. tn., Gloucestershire, England, at jn. of Rs. Avon and Severn; flour mills, shirt factory; fine Norman abbey church (12th cent.); scene of battle in Wars of Roses (1471). Pop. 4,400.

Tex'as, south central state, U.S.A., on Gulf of Mexico, and separated from Mexico by Rio Grande del Norte; mountainous in w., prairie lands and forests in centre; coastal plain in the e.; drained by Grande, Colorado, and other rivs.; climate equable near coast, more extreme inland; desert in w.; flora includes many kinds of cactus and valuable timber trees. Agriculture is highly important; principal cotton-growing state; 850,000 ac. irrigated; maize, wheat, oats, rice, and potatoes cultivated; cattle, horses, mules, sheep, and pigs raised; timber, tobacco, fruits; chief petroleum-producing state in U.S.A.; other minerals include sulphur, natural gas, mercury, cement; manufactures lumber, flour, cottonseed oil and cake, hardware, and ice; meat packing; fisheries. Principal tns., San Antonio, Dallas, Houston, Fort Worth, El Paso, and Galveston; cap. Austin. Area, 265,896 sq. m.; pop. 5,487,000.

Tex'el, largest isl., W. Frisian Islands, N. Holland prov., Holland, at entrance to Zuider Zee; wool and cheese from sheep; scene of several sea-fights between 1653 and 1799. Area, 67 sq. m.

Thale (*tā'le*), tn., Saxony, Prussia, in N. Harz Mts., 36 m. s.w. of Magdeburg; health resort with mineral springs; cement, enamelled goods, machinery. Pop. 14,000.

Thame (*tām*), mkt. tn., Oxfordshire, England, 12 m. E. of Oxford. Pop. 3,000. (2) Riv., England; rises in Bucks, and flows s.w. through Oxfordshire to join R. Thames; length, 30 m.

Thames (*temz*). (1) Riv., s. England; rises in Cotswold Hills (Gloucestershire) and flows between Oxfordshire, Bucks, Middlesex, and Essex on N., and Berks, Surrey, and Kent on S.; widens to 5 m. at the Nore; tidal to Teddington, and riv. steamers can ascend to Oxford; communicates by canal with Severn, Bristol, Midland cos., and s. coast; chief N. tribs., Cherwell, Thame, Coln, Lea; from S., Kennet, Mole, Medway. During summer riv. is a favourite resort; regattas at Henley, Kingston, etc.; Oxford and Cambridge boat race rowed between Putney and Mortlake. Part between the Nore and Teddington constitutes Port of London; between Tower and Wapping Old Stairs is the Pool. Length, 210 m.; area of basin (including that of Medway), over 6,000 sq. m. (2) Port, on R. Thames, North Island, New Zealand; gold and silver mining centre. Pop. 5,000.

Thames Ditton, par. and vil., Surrey, England, on R. Thames, opposite Hampton Court Palace; motor-car and engineering works, bronze foundry, cinema works. Pop. 8,500.

Thana. (1) Dist., Bombay, India; includes isl. of Salsette; rice, timber, pulses, oil-seeds; fisheries. Area, 3,434 sq. m.; pop. 760,000. (2) Cap. of above, on Salsette I., practically a suburb of Bombay; striped cotton cloth; from here rly. crosses to mainland. Pop. 23,000.

Thanet, ISLE OF, dist., N.E. Kent, England, now a peninsula; many Roman and Saxon relics. Landing-place of St. Augustine, and, traditionally, of Hengist and Horsa; on coast are Margate, Ramsgate, and Broad-

stairs. Length E. to W., 9 m.; N. to S., 5 m.

Thas'os, mountainous isl., Aegean Sea, Greece; trades in timber, oil, and wax; anc. gold mines. Area, 168 sq. m.; pop. c. 8,000.

Thebes (*thēbz*). (1) Anc. cap., Upper Egypt, on R. Nile, 300 m. from Cairo; founded c. 2500 B.C.; site now marked by vil. of Luxor, where there are vast ruins. (2) Anc. city of Boeotia, Greece, 44 m. N.W. of Athens; destroyed by Alexander (335); modern tn. has pop. of c. 3,000.

Theiss. See TISA.

Theodo'sia, port, Crimea, U.S.S.R.; excellent harbour; exports grain; trade in fruit, wine, and tobacco; under name of 'Kaffa of the Genoese' was most famous mediæval port on Black Sea. Pop. 27,500.

Therap'ia, residential quarter and summer resort on Bosphorus, 9 m. N.N.E. of Constantinople.

Theressina (*ter-ā-zē'nā*), city, cap. of Piauhy, Brazil, on R. Parnahyba; cotton, thread; soap works, iron foundry. Pop. 25,000.

Thermopylae (*ther-mop'i-lē*), pass, s. Thessaly, Greece; name derived from hot springs at E. end; famous for stand of Spartans against invading Persians (480 B.C.).

Thes'saly, N.E. dist., Greece, between Aegean Sea and Epirus; generally level plain bordered by mts., which include Olympus and Pindus; horse breeding. Port is Volo.

Thet'ford, mkt. tn., s. Norfolk, England; anc. cap. of E. Anglia; brewing, tanning, chemical works, agricultural implements. Pop. 4,100.

Thiaka. See ITHACA.

Thielt (*tēlt*), cap., prov. W. Flanders, Belgium, 20 m. S.W. of Ghent; lace, wool, cotton, and linen; for a time in 1914 headquarters of German army. Pop. 12,000.

Thiers (*tē-ār*), tn., Puy-de-Dôme, France, 24 m. E.N.E. of Clermont-Ferrand; cutlery, bank-note paper. Pop. 12,000.

Thionville (*tē-ōn-vēl'*) (Ger. *Dieden-hofen*), fort. tn., Moselle, France, on

R. Moselle, 22 m. N. of Metz; important rly. jn.; brewing and tanning; vines, fruit, and vegetables. Pop. 12,000.

Thirlmere, OF LEATHES WATER, lake, Cumberland, England; chief source of Manchester water supply; length, $3\frac{1}{2}$ m.; breadth, $\frac{1}{4}$ m.; depth, over 100 ft.

Thirsk, mkt. tn., Yorks, England, 22 m. N. of York; agricultural implements, leather, flour; important rly. jn. Pop. 2,800.

Thomastown, mkt. tn. and par., Kilkenny, I.F.S., on R. Nore; frieze factory and corn mills. Pop. (par.) 1,400.

Thorn. See TORUN.

Thornaby-on-Tees, munic. bor., Yorks, England, on R. Tees; iron-works, shipbuilding yards, flour and sawmills, potteries. Pop. 21,200.

Thorne, tn., s. Yorks, England, on R. Don, 9 m. N.E. of Doncaster; manufactures agricultural implements, ropes. Pop. 6,000.

Thornhill. (1) Urb. dist., W. Riding, Yorks, England, $1\frac{1}{2}$ m. s.w. of Dewsbury; woollens and carpets; anc. church of St. Michael. Pop. 11,700. (2) Vil., Nithsdale, Dumfriesshire, Scotland; sandstone quarries. Pop. 1,600.

Thornley, par. and vil., Durham, England, 6 m. S.E. of Durham; collieries. Pop. (par.) 3,750.

Thornliebank (*thorn'le-bank*), par., Renfrewshire, Scotland; part of Glasgow; cotton spinning, calico printing, bleaching. Pop. 2,600.

Thorn'ton. (1) Or THORNTON CLEVELYS, urb. dist., Lancs, England, between Blackpool and Fleetwood; agricultural dist. Pop. 10,100. (2) Vil., Fife, Scotland, 4 m. N. of Kirkcaldy; rly. jn. Pop. 2,500.

Thourout (*too-roo'*), tn., W. Flanders, Belgium, 11 m. s.w. of Bruges; linen, hats, and woollen goods; horse fairs. Pop. 11,000.

Thrace, name applied in anc. times to extensive dist. N.E. of Macedonia; mountainous; drained by R. Maritsa; tobacco cultivated. Now

divided among Greece, Bulgaria, and Turkey.

Thrap'ston, mkt. tn., Northants, England, on R. Nen, 21 m. N.E. of Northampton; blast furnaces. Pop. 1,700.

Three Rivers, city, Quebec, Canada, situated where the three branches of the R. St. Maurice enter the R. St. Lawrence; exports lumber, wood pulp, grain, cattle. Pop. 35,000.

Thun (*toon*). (1) Tn., Berne, Switzerland, on R. Aar, where it leaves L. Thun; pottery factories. Pop. 18,000. (2) LAKE OF, in canton of Berne; traversed by R. Aar; length, $11\frac{1}{2}$ m.; maximum depth, 700 ft.

Thurgau (*toor'gau*), canton, N.E. Switzerland, on w. shore of L. Constance; surface generally undulating; drained by Thur, trib. of R. Rhine; agriculture; dairy farming; fruit and wine produced; manufactures leather, woollens, cottons, embroidery; most of inhabitants are German-speaking and Protestants. Cap. Frauenfeld. Area, 386 sq. m.; pop. 140,000.

Thuringia, rep., Germany; situated w. of Saxony and N. of Bavaria, with outlying portion surrounded by Prussia; drained to rivs. Weser and Elbe; forests; potatoes, oats, wheat, rye; live-stock raised; manufactures potash. Chief tns., Weimar (cap.), Jena, Jena, and Gotha. Area, 4,541 sq. m.; pop. 1,196,500.

Thuringian Forest, or THÜRINGERWALD, range of hills, Thuringia, Germany; highest point, Grosser Beerberg (3,225 ft.); densely wooded, with beautiful valleys; 70 m. long and from 6 to 22 m. broad.

Thur'les, mkt. tn., Tipperary, I.F.S., on R. Suir; remains of castle of Knights Templars. Pop. 4,800.

Thur'stone, urb. dist., W. Riding, Yorks, England, 10 m. S.E. of Huddersfield; woollen cloth. Pop. 2,600.

Thurm'aston, urb. dist., Leicestershire, England, 3 m. N.E. of Leicester; shoemaking. Pop. 3,700.

Thurns'coe, urb. dist., W. Riding, Yorks, England, 8 m. w. of Doncaster. Pop. 10,500.

Thurs'day Island, small isl., Queensland, Australia, in Torres Strait; pearl fisheries and bêche-de-mer; coaling station at Port Kennedy. Pop. 1,700.

Thurso, port, Caithness, Scotland, on Thurso Bay; good harbour; exports flagstones; fishing. Pop. 2,900.

Tian-Shan. See TIEN SHAN.

Tiber, chief riv., central Italy; rises in Tuscan Apennines; flows s. past Perugia, Rome, Ostia, and enters Mediterranean Sea; liable to floods; navigable to confluence with R. Nera; length, 250 m.

Tiberias (modern *Tabariya*), anc. tn., Palestine, on Sea of Galilee; 680 ft. below sea-level; medicinal springs; long a great centre of Jewish learning. Pop. 6,950.

Tibet, Outer Terr., China; stretches from Himalayas on s. to Kunlun and Altyn Tagh on n.; surface consists of high mts., plateaus, and great rolling plains; wide regions still not explored; highest peak, Mustagh (23,890 ft.); desert lands in w.; R. Tsangpo (length, 1,300 m.) traverses s. of country and enters India as R. Brahmaputra; other rivs. are head streams of Ganges, Indus, Sutlej, Yangtze Kiang, Hwang-Ho, Mekong, and Salween; numerous lakes, many of them salt; hot springs. Climate extreme; great lack of moisture; barley, wheat, vegetables, and fruits cultivated in favoured areas; sheep, yaks, pigs, camels, and buffaloes reared; minerals include salt, gold, borax; industries are weaving, knitting, pottery making, and metal working; trade chiefly with China and India; principal exports, skins, wool, precious stones, live-stock. Until 1903 Europeans were forbidden to enter the country; political mission under Younghusband reached Lhasa in 1904, and agreement was signed giving facilities for trade between Tibet and Brit. India. Tibetans are of Mongoloid stock and of good physique; chief religion is Lamaism, a corrupt form of Buddhism. Cap.

Lhasa. Area, 463,200 sq. m.; pop. c. 2,000,000.

Ticehurst, par. and vil., Sussex, England, 10½ m. s.e. of Tunbridge Wells; cattle fair. Pop. 2,610.

Ticino (*tè-chè'nò*). (1) Riv., Switzerland and Italy; rises w. of Mt. St. Gotthard; flows through L. Maggiore; joins R. Po near Pavia; length, 150 m. (2) Canton, s.e. Switzerland; mountainous in n., sloping to plain of Lombardy in s.; watered by R. Ticino and its tribs.; contains part of Lakes Maggiore and Lugano; forests; olives, grapes, other fruits, cereals, tobacco, silk, wine; people are Italian-speaking Roman Catholics. Cap. Bellinzona. Area, 1,085 sq. m.; pop. 153,000.

Ticonderoga, vil., New York, U.S.A., 100 m. n. of Albany; manufactures paper-pulp and paper; graphite. Important strategic point in struggle for Canada against French, and later in American War of Independence. Pop. 4,000.

Tideswell, mkt. tn., Derbyshire, England, 6½ m. e.n.e. of Buxton; lead mined in vicinity. Pop. 2,000.

Tiel (*tèl*), tn., Gelderland, Holland, on R. Waal; agricultural machinery, paper. Pop. 12,500.

Tien Shan (*tè-en shan*), or CELESTIAL MTS., system of mts., Asia, stretching n.e. from Pamir plateau towards Gobi Desert; highest peak, Nicholas Mikailovich (22,670 ft.); source of rivs. Ili, Tarim, and Sir Darya; many glaciers; Terek Pass between Kashgar and Ferghana has alt. of over 9,000 ft.

Tientsin (*tè-en-tsèn*), city, Hopeh, China, at jn. of Pei-ho and Hun-ho rivs.; port for n. China; centre of transit trade; exports wool, skins, beans and peas; cotton mills; univ.; rice and salt markets. Pop. c. 1,380,000.

Tierra del Fuego (*tè-er'ä del fué'gò*), archipelago off s. end of S. America; belongs partly to Chile and partly to Argentina; separated from mainland by Strait of Magellan; mountainous (Mt. Sarmiento, 7,540 ft.); sheep

raised; natives, now few in number, in state of barbarism. Discovered by Magellan (1520). Area, c. 28,000 sq. m.

Tiffin, city, Ohio, U.S.A., 40 m. S.E. of Toledo; univ.; foundries, machine shops, flour mills, breweries. Pop. 14,500.

Tiflis, cap. of Georgia and of Transcaucasia, U.S.S.R., on R. Kura; on rly. between Batum and Baku; univ. (1918); exports silk, carpets, cotton, tobacco, and silver ornaments in filigree and enamel work. Pop. 283,000.

Tighina. See TUGHINA.

Tighnabruach (*tī-na-brōo'ach*), vil., Argyllshire, Scotland, on Kyles of Bute, 10 m. N.W. of Rothesay; summer resort. Pop. 1,500.

Tigré (*tē-grā*), N. div., Abyssinia; stock raising; chief tns., Aduwa and Aksum.

Tigris, riv., Iraq; rises in two head streams in mts. of Kurdistan and Armenia; flows S.E. and, after a course of 1,150 m., unites with Euphrates at Kurna to form Shatt-al-Arab; chief tribes, Greater Zab, Lesser Zab, and Diyala; flows through fertile alluvial dist., the home of one of oldest civilizations of world; important tns. and ruins on banks are Diarbekr, Nineveh, Mosul, Tikrit, Baghdad, Ctesiphon, and Kut; navigable by steamers to Baghdad.

Tikrit (*tēk-rēt*), tn., Iraq, on R. Tigris and on rly. 100 m. N. of Baghdad; birthplace of Saladin. Pop. c. 3,000.

Til'burg, tn., N. Brabant, Holland; woollens, tobacco, and leather. Pop. 71,500.

Til'bury, urb. dist. and port, Essex, England, on R. Thames, 22 m. E. of London; fort built by Henry VIII.; chief defence of Thames above Sheerness; docks accommodate largest vessels; packet station for Dunkirk; connected with Gravesend by steam ferry. Pop. 16,800.

Tillicoultry (*tīl-i-koo'trī*), tn., Clackmannanshire, Scotland, on R. Devon; woollen fabrics, tartan, shawls; coal mining. Pop. 3,000.

Til'sit, tn., E. Prussia, Germany, on R. Niemen; glass, soap, and oil; engineering and chemical works, iron foundries, tanneries, and distilleries; scene of signing of treaty between Alexander I. of Russia and Napoleon (1807). Pop. 51,000.

Timar'a, port, South I., New Zealand, on E. coast; wool, skins, tallow, flour, and frozen mutton. Pop. 18,000.

Timbuktu', tn., French Sudan, Africa, 9 m. from N. bend of R. Niger; founded by Tuaregs (11th cent.); great caravan centre, linking Niger basin with N. Africa; trade in gums, rubber, gold, salt, wax, ivory, and grain; wireless station. Pop. c. 7,000.

Timisoara (*tē-mēsh-wa'ra*), formerly TEMESVAR, tn., W. Romania, near Hungarian frontier; tobacco, cloth, paper, oil. Pop. 72,500.

Tim'mins, city, N. Ontario, Canada, 44 m. S.W. of Cochrane; mining. Pop. 12,000.

Timor', largest and most easterly of Lesser Sunda Islands, Malay Archipelago; coast rugged, and interior mountainous and well wooded; N.E. part is Portuguese (cap. Dilli), and S.W. belongs to Dutch (cap. Kupang); exports copra, coffee, sandalwood, and wax; fisheries. Area, c. 12,400 sq. m.; pop. c. 800,000.

Timor'-Laut, or TENIMBER ISLANDS, group of islands, Malay Archipelago; belong to Dutch; largest isl., Yemdena, hilly and well wooded; smaller islands low and of coralline formation; exports trepang, turtle, and pearl oysters. Area, 2,060 sq. m.; pop. c. 25,000.

Tine'o, tn., N. Spain, 28 m. W. of Oviedo, in mining, agricultural, and stock-rearing dist. Pop. 22,000.

Tinnevel'y. (1) Dist., S. Madras, British India; rice, cotton, oil-seeds. Area, 4,325 sq. m.; pop. 2,000,000. (2) Tn. in above dist.; mission centre; fine Siva temple. Pop. 54,000.

Tintagel (*tīn-taj'el*), par., Cornwall, England, 5 m. N.W. of Camelford; on Tintagel Head (300 ft.) are ruins of Tintagel Castle, traditional birthplace of King Arthur. Pop. 1,300.

Tin'tern Abbey, Monmouthshire, England, near R. Wye, 4 m. N. of Chepstow; founded by Cistercians in 1131; ruins purchased for nation in 1900.

Tippera', dist., Bengal, India, E. of Dacca; drained by R. Meghna; adjoining Tripura (Hill Tippera); jute cultivated. Cap. Comilla. Area, 2,560 sq. m.; pop. 2,743,000.

Tippera'ry. (1) Co., Munster, I.F.S.; surface generally flat, but crossed by Galtee, Knockmealdown, and other mts.; chief rvs., Shannon and Suir; Golden Vale, N. of Galtee Mts., very fertile; cereals and dairy produce; co. tn., Clonmel. Area, 1,643 sq. m.; pop. 141,000. (2) Tn. in above, 25 m. S.E. of Limerick; military barracks, condensed milk factory, and butter market. Pop. 5,600.

Tip'ton, tn., Staffs, England, 1½ m. N. of Dudley; collieries; cement and brick works; ironworks; galvanizing, cables, anchors, boilers. Pop. 35,800.

Tip'tree Heath, eccles. dist., Essex, England, c. 7 m. N.E. of Maldon; fruit farms and preserve works. Pop. 3,000.

Tirah', mountainous dist., Peshawar, N.W. Frontier Prov., India; pasturage in valleys in summer; inhabited by Afridi and Orakzai tribes, who rose against British in 1897-98.

Tiran'a, cap., Albania; olive groves. Pop. 17,000.

Tiras'pol, tn., Moldavian rep., U.S.S.R.; port on R. Dniester; tobacco, candles, tallow, flour. Pop. 30,000.

Tircon'aill. See DONEGAL.

Tiree. See TYRER.

Tireh (*tî-rî'*), tn., Aidin, Asia Minor, 45 m. S.E. of Smyrna; trade in raisins, tobacco, cotton. Pop. c. 15,000.

Tirhut', div., Bihar and Orissa, Brit. India, between R. Ganges and Nepal; rich soil; rice, maize, wheat, barley, oil-seeds. Area, 12,598 sq. m.; pop. 9,950,000.

Tirlemont (*tîr-le-môn*), tn., Brabant, Belgium, 25 m. E. by S. of Brussels; woollen goods, leather, machinery. Pop. 20,500.

Tirnovo. See TIRNOVO.

Tirol, prov., W. Austria, traversed by E. Alps; magnificent scenery; drained by Inn, trib. of R. Danube; Brenner Pass gives easy access between Italy and Austria; pastoral; forests; salt worked; textiles made by water-power; metal goods, saw-mills. Chief tn., Innsbruck. Area, 4,882 sq. m.; pop. 314,000.

Tiru'pati, tn., Madras, India, 84 m. N.E. of Madras; brasswork, wood carving. Pop. 17,500.

Tisa (*tî'sa*) (Magyar Tisa, German *Theiss*), riv., trib. of R. Danube, Europe; rises as Black Tisa and White Tisa in N.E. Carpathian Mts., Czechoslovakia; flows S. through Hungary and Yugoslavia for 800 m.; navigable to Szolnok. Chief tn. on banks, Szeged.

Titchfield, par. and vil., Hants, England, 9½ m. S.E. of Southampton; strawberries cultivated; Charles I. sailed from here to Isle of Wight in attempt to escape from Roundheads. Pop. 2,000.

Titicac'a, lake, Bolivia and Peru, S. America; alt. 12,500 ft.; contains several islands, largest of which, Titicaca, has ruins of Inca palace; navigated by small steamers. Length, 130 m.; breadth, 35 m.; area, c. 5,500 sq. m.

Tiv'erton, mkt. tn., Devonshire, England, 12 m. N. of Exeter; lace, flour, beer. Pop. 9,600.

Tiv'oli, tn., Italy, 18 m. N.E. of Rome; grapes and olives; electric power from falls of R. Anio; favourite resort in Roman times; remains of Hadrian's villa. Pop. 16,500.

Tlaxcala (*tlāsh-kā'lā*). (1) State, Mexico, on central plateau; chief industry, agriculture. Area, 1,534 sq. m.; pop. 180,000. (2) Cap. of above, 60 m. E. of Mexico; cloth factories. Pop. 2,000.

Tiensen', tn., Oran, Algeria; on high rock, surrounded by walls; exports cork, ostrich feathers, textiles, carpets, leather goods. Pop. 27,000.

Toba'go, isl., Brit. W. Indies, 20 m. N.E. of Trinidad; hilly; forests; chief product cocoa; also coconuts,

vegetables and fruit, spices; politically and commercially connected with Trinidad. Cap. Scarborough. Area, 114 sq. m.; pop. 23,500.

Tobermory, vil. and port, Mull, Argyllshire, Scotland, on Sound of Mull; distillery; *Almirante de Florencia*, treasure ship of Spanish Armada, sunk here; attempts to recover treasure unsuccessful. Pop. 800.

Tobolak', tn., Ural Area, R.S.F.S.R., on R. Irtysh, at mouth of R. Tobol; makes fishing nets; mammoth ivory carving; skins. Pop. 15,000.

Tocantins', riv., Brazil; rises in Brazilian Highlands and flows N. to Rio Para, at R. Amazon estuary; many falls and rapids; navigable for 400 m. from mouth, and 400 m. above rapids; length, 1,500 m.

Tod'dington, mkt. tn., Beds, England, $4\frac{1}{2}$ m. N. of Dunstable; market gardening. Pop. 2,000.

Todi (*tò-dè'*), tn., Umbria, Italy, 28 m. S. of Perugia; cathedral; Etruscan remains; church of S. Maria della Consolazione, w. of tn., is a pilgrim resort. Pop. 18,500.

Tod'morden, tn., W. Riding, Yorks, England, on R. Calder, 12 m. W. of Halifax; rly. jn.; cotton spinning, weaving, and machinery. Pop. 22,200.

To'goland, country, W. Africa; divided between Gold Coast and Dahomey; surface rises from coast to interior (over 3,000 ft.); forests; drained by Oti, trib. of R. Volta; dyewoods, rubber, cocoa, oil-palms, maize, fruits; exports palm oil, cocoa, copra, cotton; native industries are weaving, pottery, straw plaiting. Former German colony; under mandate of League of Nations, Great Britain obtained about one-third of country (12,500 sq. m.), and France the remainder. Chief French tn., Lomé. Total area, 33,700 sq. m.; pop. 747,000.

Tokai', tn., Asia Minor, 70 m. S. of Samsun, on Black Sea; copper and leather. Pop. 78,000.

Tokay', or **To'kaj**, tn., N.E. Hungary, on R. Tisa; noted for wines. Pop. 5,000.

Tokelau. See **UNION**.

Tokyo (*tò'hè-o*), cap., Japan, on Honshu isl.; imperial palace; univ.; largely rebuilt after earthquake of 1923; beautiful parks; dockyards; manufactures machinery, silk, lacquer, earthenware, china, and enamels. Pop. 1,996,000.

Toledo (*tò-lá-dò*). (1) Prov., central Spain; mountainous; agriculture, and some weaving; gold, silver, iron, lead, and other minerals found. Area, 5,919 sq. m.; pop. 443,000. (2) Cap. of above, on R. Tagus; surrounded by old walls; anc. cathedral; Moorish architecture; long famous for manufacture of swords; other manufactures are gold and silver church ornaments, and cloth. Pop. 25,000. (3) City, Ohio, U.S.A., near L. Erie; important rly. jn.; great commercial centre; important grain and clover seed market; exports coal; manufactures include flour, lumber, bicycles, agricultural implements, engines, motors. Pop. 291,000.

Tolentino (*tol-en-tè-nò*), tn., Marches, Italy, on R. Chienti, 36 m. S.W. of Ancona; cathedral; manufactures silks, woollen goods, wine. Pop. 13,000.

Tolu'ca, tn., Mexico, 40 m. S.W. of Mexico City; cotton and flour mills, breweries. Pop. 34,000.

Tomaszow (*tom-a shuf*), tn., Poland, 28 m. S.E. of Lodz; silk, woollens, hardware, and flour. Pop. 28,000.

Tomak, tn., Siberian Area, U.S.S.R., on R. Tom; educational centre; headquarters of mining dist.; tanneries; trade centre; connected by branch line with Trans-Siberian Rly. Pop. 92,000.

Ton'bridge, tn., Kent, England, on Medway, 27 m. S.E. of London; remains of castle; public school. Pop. 16,300.

Ton'ga (or **FRIENDLY**) Islands, in Pacific, midway between Fiji and Samoa; under Brit. protection; divided into Tongatabu, Haabai, and Vavau groups; of coral and volcanic formation, with active volcanoes; chief product, copra. Chief town,

Nukualofa. Area, c. 385 sq. m.; pop. c. 27,000.

Tongkah. See PUKET.

Tongking', province of French Indo-China; bounded N. by China, E. by Gulf of Tongking, S. by Annam, W. by Laos; surface consists of delta of Red R., with its great tributaries, Black R. and Clear R., in the S.E.; plateau in N., and forest region in W. Delta is very fertile; two harvests yearly. Produces great quantities of rice, coffee, tobacco, cotton, jute, and sugar; manufactures cotton, furniture, and paper. Minerals include coal, tin, limestone. Chief tns., Hanoi (cap.), and Haiphong, an important port. Area, 40,530 sq. m.; pop. 7,402,000.

Tongres (*tongr*), tn., Limburg, Belgium, on R. Geer, 12 m. N.W. of Liège; church of Notre Dame (13th-14th cent.); mineral springs. Pop. 10,000.

Tongue (*tung*), par. and vil., Sutherlandshire, Scotland, 44 m. W. of Thurso; on E. shore of Kyle of Tongue, a sea loch, 9 m. long. Pop. (par.) 1,350.

Tonlé-Sap, lake, Cambodia, Indo-China; connected with R. Mekong by Bras du Lac channel. Area (during dry season), 100 sq. m.; depth, 2-6 ft.; (during flood season of R. Mekong), 800 sq. m.; depth, 50 ft.

Tönsberg, seaport, Norway, near entrance of Oslo Fjord; headquarters of sealing and whaling fisheries. Pop. 12,000.

Toot'ing, dist., Surrey, England, 8½ m. S. of London; on beautiful common. Pop. 40,700.

Toowoomba, tn., Queensland, Australia, 100 m. by rail W. of Brisbane; on summit of Great Dividing Range (alt. 2,000 ft.); centre of fertile dist.; has flour mills, tanneries, and brewery; manufactures wine. Pop. 24,000.

Tope'ka, cap., Kansas, U.S.A., 70 m. W. of Kansas City; rly. workshops; manufactures flour and machinery. Pop. 64,000.

Tops'ham, tn., Devonshire, England, on R. Exe; sawmill; formerly

important seaport; coasting trade. Pop. 3,300.

Tor Bay, inlet, S. Devon, England, 18 m. S. of Exeter; important haven for shipping; landing-place of William of Orange (1688).

Torgau (*tor'gau*), tn., Saxony, Prussia, on R. Elbe, 31 m. E.N.E. of Leipzig; manufactures gloves, glass, pottery; 15th cent. castle. Pop. 13,000.

Toron'to, cap., Ontario, Canada, on N.W. shore of L. Ontario; educational centre; univ.; important rly., lake shipping, manufacturing, and trading centre; deals in lumber, cattle, grain, and fruit; electrical energy generated at Niagara Falls. Pop. 570,000.

Torphichen (*tor-fich'en*), vil., W. Lothian, Scotland, 2½ m. N. of Bathgate; coal mines, ironworks. Pop. 650.

Tor'point, urb. dist., Cornwall, England, on estuary of R. Tamar, opposite Devonport; sulphuric acid and manure. Pop. 4,000.

Torquay (*tor-kē*), port, wat.-pl., S. Devon, England, on Tor Bay; remains of Tor Abbey (12th cent.); Kent's Cavern, a noted bone cave, is near by; terra-cotta ware; marble polishing. Pop. 46,200.

Torre Annunziata (*tor'rā ā-noont-sē-d'ā*), tn., Italy, at S. base of Mt. Vesuvius, 14 m. by rail S.E. of Naples; mineral springs; govt. factory for arms; ironworks; macaroni; silk; fishing; suffered during eruption of Vesuvius (1906). Pop. 32,500.

Torre del Greco (*tor'rā del grā'hō*), port, fishing tn., seaside resort, Italy, at S.W. base of Mt. Vesuvius, 8 m. S.E. of Naples; chiefly built of lava; suffered during eruptions of Vesuvius; coral working; tunny, sardine, and oyster fisheries. Pop. 34,000.

Tor'rens, LAKE, large salt lake, S. Australia, W. of Flinders Range, 35 m. N. of Port Augusta; extends 130 m. N. to S.; marsh in dry seasons; discovered by Eyre (1841).

Tor'res Strait, between New Guinea and York Peninsula, Queensland,

Australia; navigation rendered difficult by reefs, shoals, and islands (including Thursday I.); first navigated by Spaniard Torres (1606); breadth, 80-90 m.

Torres Vedras (*u'drás*), *tn.*, Estremadura, Portugal, 26 m. n.w. of Lisbon; Moorish citadel; hot sulphur baths; Wellington's famous lines (1810-11) extended from near *tn.* to R. Tagus. Pop. 8,000.

Torrington, *city*, Connecticut, U.S.A., 23 m. w. of Hartford; brass, silver, copper, nickel, and gold-plated goods, machinery, woollen goods. Pop. 26,000.

Torrington, **GREAT**, *munic. bor.*, *mkt. tn.*, Devonshire, England, 6 m. s.e. of Bideford; gloves; flour milling, leather dressing. Pop. 2,900.

Tortola. See under VIRGIN ISLANDS.

Tortona, *tn.*, Piedmont, N. Italy, 12 m. E. of Alessandria; silk manufactures; 9th cent. cathedral. Pop. 20,000.

Tortosa, *city*, Catalonia, N.E. Spain, near mouth of R. Ebro; Gothic cathedral (14th cent.); manufactures paper, leather, majolica, soap, liquorice. Pop. 33,000.

To'ran (German *Thorn*), *fortified tn.*, Poland, on R. Vistula, 92 m. s. of Danzig; machinery; trades in timber and grain; birthplace of astronomer Copernicus. Pop. 39,500.

Tornbök, *tn.*, European Russia, 40 m. n.w. of Tver; noted for gold and silver embroidered articles. Pop. 15,000.

Totana, *tn.*, Murcia, s.e. Spain, 10 m. N.E. of Lorca; exports fruit; manufactures linen, leather, earthenware jars. Pop. 14,000.

Totnes, *tn.*, *riv. port*, s. Devon, England, on R. Dart, 10 m. n.w. of Dartmouth; cider; *riv. fisheries*; anc. buildings; Norman keep. Pop. 4,500.

Totonicapan, *tn.*, Guatemala, Central America, 62 m. n.w. of Guatemala city; textiles, pottery, and musical instruments; thermal springs in vicinity. Pop. 31,000.

Tot'tenham, *urb. dist.*, part of

London, England, 6 m. N. of St. Paul's Cathedral; contains Bruce Castle, which belonged to the father of Robert the Bruce. Pop. 157,700.

Tot'tington, *urb. dist.*, Lancs, England, 2½ m. n.w. of Bury; cotton-spinning works. Pop. 6,500.

Tot'ton, *vil.*, Hants, England, near head of Southampton Water, 4 m. w.n.w. of Southampton; flour and saw mills. Pop. 4,000.

Toul (*toof*), *tn.*, Meurthe-et-Moselle, France, on l. bk. of R. Moselle, 14 m. w. of Nancy; frontier fortress; manufactures earthenware, hats, embroidery, and lace; trades in wine and brandy. Pop. 10,000.

Toulon (*too-lôn*), *port*, first-class fortress and naval station, Var, France, 42 m. E.S.E. of Marseilles; headquarters of Mediterranean fleet; cathedral (11th to 12th cent.); naval shipbuilding yards; exports fruits, oil, wine, salt. Pop. 93,000.

Toulouse (*too-loos*), *tn., cap.*, Haute-Garonne, France, on R. Garonne and Canal du Midi; cathedral (11th cent. onwards), univ., art academy; iron and copper foundries, cannon making, powder factory, stained glass, leather, paper, tobacco, brandy. Pop. 152,500.

Touraine (*too-rân*), *anc. prov.*, France, now forms Indre-et-Loire and part of Vienne; *cap.* Tours; formed part of French possessions of Plantagenet kings of England.

Tourecoing (*toor-kwîn*), *tn.*, Nord, France, near Belgian frontier; woollens, cottons, carpets; occupied by Germans (1914-18). Pop. 79,500.

Tournai (*toor-nâ*) (Flemish *Doornik*), *tn.*, Hainaut, Belgium, on R. Schelde; textiles, carpets, embroideries, cement; in Great War occupied by Germans (1914-18). Pop. 36,500.

Tours (*toor*), *cap.* of Indre-et-Loire, France, on R. Loire; cathedral (12th to 16th century); ruined Château Plessis-lès-Tours in vicinity; iron and steel industries, leather, wine, woollens, silks, printing; here Charles Martel defeated Saracens (732). Pop. 73,000.

Towcester (*tô'ster*), *mkt. tn.* and

par., Northants, England, 9 m. s.w. of Northampton; boots and shoes, lace; occupies site of Roman station. Pop. (par.) 2,400.

Tow Law (*tou'*), tn., Durham, England, 8 m. n.w. of Bishop Auckland; coal and clay mined. Pop. 3,600.

Townsville, port, Queensland, Australia, on Cleveland Bay; outlet for gold-mining and pastoral dist.; manufactures soap, ice, beer, stationery. Pop. 30,000.

Towton (*tou'ton*), par., W. Riding, Yorks, England, 2½ m. s. of Tadcaster; scene of battle (1461) in Wars of Roses. Pop. 80.

Towyn (*tou'in*), tn., Merionethshire, Wales, 3 m. n.w. of Aberdovey; seaside resort; lead mining, fishing. Pop. 3,800.

Toyama, tn., Honshu, Japan; on w. coast, on Toyama Bay; centre of trade and manufactures. Pop. 67,500.

Trafalgar (Spanish *trafalgar'*), CAPE, low promontory, S. Spain, at w. entrance to Straits of Gibraltar; scene of Nelson's victory over French and Spanish fleets (1805).

Trail, tn., Brit. Columbia, Canada, near U.S. border and L. Kootenay, 6 m. n.e. of Rossland; large electric smelter for lead, zinc, and copper. Pop. 6,000.

Tralee, co. tn., port, and mkt. tn., Kerry, I.F.S., on R. Lee; connected with Tralee Bay by ship canal for 200-ton vessels; exports grain and butter. Pop. 10,500.

Tramore (*trá-mór*), mkt. tn., Waterford, I.F.S., on Tramore Bay; seaside resort. Pop. 1,800.

Tranent, tn., E. Lothian, Scotland, 9½ m. E. of Edinburgh; collieries. Pop. 4,500.

Trani (*trá'ná*), port, Bari, Italy, on Adriatic Sea; cathedral; trade in wine and olive oil; harbour now silted up. Pop. 35,000.

Transcaucasia, Soviet rep., U.S.S.R., s. of Caucasus Mts.; consists of reps. of Georgia, Azerbaijan, and Armenia. See separate articles.

Transeo'na, tn., Manitoba, Canada,

10 m. n.e. of Winnipeg; industrial centre. Pop. 5,000.

Trans-Jordan, terr., Asia, E. of Palestine; in w. contains fertile lands of Gilead, Moab, and Edom, producing grapes and wheat; stretches E. to desert; mandated to Britain by League of Nations; traversed by Hejaz Rly. Chief tn., Amman. Pop. c. 260,000.

Transkeian Territories, region, Cape Prov., between Kei R. and Natal, Union of S. Africa, includes Griqualand E., Tembuland, Transkei, Pondoland; surface level near coast, mountainous farther inland; watered by St. John's and other rivs.; produces timber, cereals, bananas, oranges, lemons; cattle, sheep, and horses raised; mainly a native reserve; annexed to Cape Colony between 1879 and 1894. Total area, 16,351 sq. m.; pop. c. 900,000 (13,700 whites).

Transvaal, inland prov., Union of S. Africa, between Vaal and Limpopo rivs.; bounded N. by S. Rhodesia, E. by Portuguese E. Africa and Swaziland, S. by Orange Free State and Natal, W. by Cape Prov. and Bechuanaland; length from N. to S., c. 400 m.; breadth, c. 470 m.; an undulating plateau from 1,000 to 7,000 ft., traversed by mountain ranges and isolated hills (*kopjes*); in E. are Drakensberg Mts.; Witwatersrand, c. 6,000 ft., n.w. of Johannesburg; large part of plateau, known as High Veld, generally covered with good pasture, but treeless; Bush Veld, in N. and on E. border, low, and fairly well wooded; principal rivs. are Limpopo and Vaal, with Olifants and other tribs.; none navigable. Climate hot and dry, and subject to dust storms; Bush Veld tropical; unhealthy during rainy season, when malaria is prevalent; summer (Oct.-March) is rainy season; average ann. rainfall c. 25 to 30 in., greatest in E. Mainly a stock-raising country, with large areas suited for agriculture; chief crops, maize and tobacco; rich in gold, diamonds, iron ore, coal, silver, copper, lead; largest goldfields in Witwaters-

rand; Premier Mine, near Pretoria, is chief diamond mine; engineering, brewing, pottery, tobacco, soap, candles, wagons; chief exports, minerals, cattle, hides, wool. Chief tns., Johannesburg, Pretoria (cap.). Area, 110,450 sq. m.; pop.—natives (1921) 1,544,000, whites (1926) 608,600.

Transylva'nia, div., w. Romania, bordering on Hungary; surface a plateau, c. 1,200 ft., bounded by Transylvanian Alps and Carpathian Mts.; forested; drained by Rs. Someşul and Muresul; produces cereals, pulse, tobacco, fruits; cattle, horses, sheep, and pigs raised; minerals include gold, silver, salt, coal, iron, lead, copper; belonged to Hungary (1867-1918); ceded to Romania (1920). Chief tns., Cluj and Brasov. Area, 22,312 sq. m.; pop. 2,678,500.

Transylva'nian Alps, continuation of Carpathian Mts. on s. border of Transylvania, Romania; several peaks are over 8,000 ft.

Trap'ani, port, w. Sicily; manufactures coral, alabaster, and mother-of-pearl goods; exports salt, wine, cheese, olive oil; was a Carthaginian stronghold. Pop. 84,000.

Trau. See TROGIR.

Trau'tenau. See TRUTNOV.

Travancore', Indian state, s.w. Madras, India; includes part of Cardamom Hills; fertile; rice, coconuts, pepper, tapioca, cardamoms, timber. Cap. Trivandrum. Area, 7,625 sq. m.; pop. 4,000,000.

Treb'izond (Turkish *Trabzon*), tn., Asia Minor, on s. coast of Black Sea; originally a Greek colony; captured by Turkey (1461); caravan centre; exports tobacco, carpets, hides, and skins. Pop. 61,000.

Tred'egar, urb. dist., Monmouthshire, England, 7 m. E.N.E. of Merthyr Tydfil; ironworks and collieries. Pop. 23,300.

Tremad'oc, tn., Carnarvonshire, Wales, on bay at N.E. of Cardigan Bay, 4 m. N.E. of Criccieth; built on reclaimed land; trade lost to Portmadoc. Pop. 4,300.

Trengganu', Unfederated Malay State, E. coast of Malay Peninsula; produces fish, tin, rubber, hematite, copra. Chief tn., Kuala Trengganu. Area, 3,500 sq. m.; pop. 154,000.

Trent. (1) Riv., England; chief riv. of Midlands; rises N. Staffs; flows through Staffs, Derbyshire, Notts, Lincolnshire; unites with Ouse to form Humber; chief tribs., Dove, Derwent, Idle, and Soar; chief tns. on its banks, Stoke, Burton, Nottingham, Newark, and Gainsborough; navigable for barges to Burton; length, 170 m. (2) (Italian *Trento*), chief tn., Trentino, Italy, on R. Adige; cathedral; silk weaving; pottery, wines; meeting-place of famous Council of Trent (1545-63). Pop. 62,500.

Trent'ham, par. and vil., Staffs, England, on R. Trent, 3 m. S. of Stoke-upon-Trent; its Hall, residence of Duke of Sutherland, was dismantled in 1911. Pop. (par.) 2,550.

Trentino (*tren-tē'nō*), area of N. Italy, on S. slope of Alps; drained by R. Adige; formerly part of Austrian Tirol; ceded to Italy after Great War; now forms dep. of Venezia Tridentina.

Tren'ton. (1) Cap., New Jersey, U.S.A.; at head of navigation of Delaware R.; manufactures earthenware and pottery, iron and steel, rubber goods, machinery, woollens. Pop. 123,000. (2) Tn., Ontario, Canada, on N. shore of L. Ontario, 55 m. W. of Kingston. Pop. 6,000.

Tréport. See LE TRÉPORT.

Trèves. See TRIER.

Treviso (*trev-ē'zō*), tn., Italy, 18 m. N. of Venice; 15th cent. cathedral; iron goods, pottery, silks, and woollens. Pop. 58,000.

Trichinop'oly. (1) Dist., Madras, India; generally an undulating plain watered by R. Cauvery; rice, groundnuts, cotton. Area, 4,319 sq. m.; pop. 1,903,000. (2) Cap. of above, on R. Cauvery; built round Rock (273 ft.); riv. jn.; temples attract pilgrims; cigars, cheroots, hardware, and gold and silver jewellery. Pop. 120,500.

Trier (*trēr*) (French *Trèves*), tn.,

Rhineland, Prussia, on R. Moselle; manufactures linen, cottons, woollens, leather, stained glass; iron foundries, machinery, dyeing; claims to be oldest town in Germany; interesting Roman remains; cathedral (11th to 13th cent.). Pop. 58,500.

Trieste (*trē-es-tā*), port, Italy, at N.E. of Adriatic Sea; formerly chief seaport of Austria; trades in grain, wine, and oil with Levant and Far East; old tn., with narrow and steep streets, has cathedral and castle; univ. (1924); shipbuilding and ironfounding; assigned to Italy (1918). Pop. 255,500.

Trik'kala, tn., Thessaly, Greece, 38 m. w. of Larissa; cotton and woollen goods, leather; trades in wheat, silk, tobacco. Pop. 19,000.

Trim, co. tn., Meath, I.F.S., on R. Boyne; mkt. tn.; ruined castle (12th cent.). Pop. 1,300.

Trimdon, par. and vil., Durham, England, 8 m. S.E. of Durham; collieries and iron foundries. Pop. (par.) 5,400.

Trincomali (*tring-kō-mā-lē'*), port, N.E. Ceylon; fine natural harbour; place of pilgrimage. Pop. 10,000.

Tring, mkt. tn., Herts, England, 5 m. N.W. of Berkhamstead; Rothschild Museum. Pop. 4,400.

Trinidad'. (1) Isl., Brit. W. Indies, off N.E. coast of Venezuela, S. America; surface hilly; rises to 3,000 ft.; contains Pitch L. (104 ac.) in S.W., source of natural asphalt; oilfields; climate tropical; produces sugar and cacao; manufactures rum, angostura bitters, coconut oil; exports petroleum, asphalt, sugar, cocoa, copra, bitters. Discovered by Columbus (1498). Chief tn., Port of Spain. Area, 1,862 sq. m.; pop. 397,000. (2) Tn., s. Cuba; exports sugar, molasses, and honey. Pop. 46,000.

Trip'oli. (1) Tn., cap., Tripolitania, N. Africa, on Mediterranean Sea; caravan centre; carpets; tobacco factory. Pop. 60,000. (2) Tn., Syria, Asia, 44 m. N.E. of Beirut; exports oranges, silk, grain, sponges. Pop. 37,500.

Tripolita'nia, dist., Italian Libya,

N. Africa; mainly desert; includes N. part of Sahara plateau, c. 2,000 ft. high; coastal oases yield tobacco, dates, olives, oranges; steppes for pasture, wheat, barley, esparto; in desert are oases of Ghadames and Ghat; sponge and tunny fisheries; trades in ostrich feathers brought by caravans. Annexed by Italy (1911). Inhabitants are Negroes, Arabs, Jews, and Europeans. Chief tns., Tripoli (cap.), Misurata, Homs. Area, c. 360,000 sq. m.; pop. c. 570,000.

Tripoli'tsa, or **TRIPOLIS**, cap., Arcadia, Morea, Greece; manufactures tapestries and leather goods. Pop. 14,500.

Tipu'ra, formerly **HILL TIPPERA**, semi-independent state, Bengal, India, on boundary of Assam; hills forested; elephants, tigers, leopards; rice and tea. Area, 4,116 sq. m.; pop. 304,500.

Tris'tan da Cunha (*koon'yā*), largest of three volcanic islands in S. Atlantic Ocean, more than half-way between Rio de la Plata and Cape Town; surface mountainous; produces potatoes and apples; cattle and sheep raised; discovered by Portuguese admiral, from whom they take their name (1506); annexed by Brit. (1816). Area, 16 sq. m.; pop. 130.

Trivan'drum, cap., Travancore, Madras, India; military cantonments to N. of tn.; religious centre and place of pilgrimage; observatory. Pop. 73,000.

Trnava (*ter'nā-vā*), formerly **NAGY-SZOMBAT**, tn., Czechoslovakia, 26 m. N.E. of Bratislava; mkt. tn.; cloth, sugar, and chemicals. Pop. 18,000.

Trnovo (*tr'no-vō*), city, Bulgaria, 80 m. N.E. of Philippopolis; copperware; cap. of Bulgaria from 1186 to 1393. Pop. 13,000.

Tro'gir (Italian **Trau**), port, Dalmatia, Yugoslavia, 10 m. w. of Split; cathedral (13th cent.); trades in fruit and wine. Pop. 3,500.

Tro'itsk, town, s. Ural Area, R.S.F.S.R., on l. bk. of trib. of R. Tobol; tanneries; flour mills. Pop. 30,000.

Troitskosavsk (*trō-its-kō-sāvsk*), tn., Buriat Mongol rep., U.S.S.R., on Kiakhka, trib. of R. Selenga, 2 m. N. of frontier tn. of Kiakhka; gold, osmiridium, and salt. Pop. 9,000.

Trollhättan, tn., Elfsborg, Sweden, 45 m. by rail N. of Göteborg; famous falls with locks leading to Gota Canal; falls supply water-power for lumber and other industries, and for electricity to Copenhagen. Pop. 16,000.

Tromsø, port, N. Norway, on Tromsø I.; exports furs, whale and seal oil; also fish. Pop. 11,500.

Trondhjem (*trond'yem*). See NIDAROS.

Troon, port, Ayrshire, Scotland, 6 m. N. of Ayr; shipbuilding; exports coal; golfing centre. Pop. 8,500.

Tropæa. See OPAVA.

Trossachs (*tros'aks*), wooded glen (1 m. long), Perthshire, Scotland, between Lochs Achray and Katrine, 8 m. S.W. of Callander; immortalized in Scott's *Lady of the Lake*.

Trotak, formerly GATCHINA, tn., Russia, 25 m. S. of Leningrad; summer resort. Pop. 15,000.

Trouville (*trō-vēl'*), seaside resort, Calvados, France, on English Channel, 9 m. S. of Le Havre; boat building, fishing; its port is shared by Deauville. Pop. 6,000.

Trowbridge (*trōw'brīj*), tn., Wilts, England, 11 m. S.E. of Bath; broadcloths and kerseymeres manufactured since 16th cent. Pop. 12,000.

Troy. (1) Famous city of legendary Greek history, N.W. Asia Minor, near entrance to Dardanelles; city of Homer's *Iliad*; last or ninth city on this site was ruined by Turks in 1306.

(2) City, New York, U.S.A., on Hudson R., and on Erie and Champlain canals; collars, shirts. Pop. 72,000.

Troyes (*trōv'*), chief tn., Aube, France, on R. Seine, 104 m. by rail E.S.E. of Paris; hosiery, iron goods, looms; cathedral (begun 1208). Treaty between England and France signed here (1420). Pop. 58,500.

Trujillo (*trōo-hēl'yō*). (1) City, Extremadura, Spain, 75 m. N.E. of Badajoz; birthplace of Pizarro; dist.

produces fruit, wine, oil. Pop. 11,500. (2) Tn., Peru, S. America, near Pacific Ocean; univ. in irrigated sugarcane dist.; exports copper, gold, and silver. Pop. 30,000.

Truro. (1) City, Cornwall, England, 11 m. N. of Falmouth; cathedral; former trade in tin and copper, now chiefly mkt. tn.; exports china clay. Pop. 11,100. (2) Tn., Nova Scotia, 51 m. N.N.E. of Halifax; hosiery; govt. college of agriculture. Pop. 8,000.

Trutnov (*trut'nof*) (German *Trautenau*), tn., Bohemia, Czechoslovakia, at base of Riesengebirge; coalmining; linens. Pop. 15,000.

Tsana. See YANA.

Tsangpo, riv., Tibet, Asia; rises near R. Sutlej at alt. of 15,958 ft.; flows E. between Himalayas and Trans-Himalayas for c. 900 m.; breaks through gorge of Himalayas into Assam, where it is named R. Brahmaputra.

Tsari'syn. See STALINGRAD.

Tsarskoye Selo. See DYETSKOYE SELO.

Tsinan (*tsē-nān'*), or CHINAN, cap., Shantung, China, at base of Shantung Highlands and near Hwang-Ho; rly. jn.; flour mills, cotton factories. Pop. 300,000.

Tsingtao (*tsing-tōu'*), port, Shantung, China, on Kiaochow Bay; connected by rly. with Tsinan; salt fields; exports straw braid, silk. Pop. 318,000.

Tsushima (*tsōo'shē-mā*), isl. between Korea and Japan; in centre of strait of Tsushima or Korea, where Japanese destroyed Russian fleet (1905). Area, 260 sq. m.; pop. 40,000.

Tuam, tn., Galway, I.F.S., on R. Clare, 18 m. N.E. of Galway; cathedral; college for R.C. clergy. Pop. 3,000.

Tuamo'u (formerly PAUMOTU), or LOW ARCHIPELAGO, includes c. 80 low coral reefs in S. Pacific Ocean; pearl fishing; belong to France. Area, c. 350 sq. m.; pop. 4,500.

Tuap'sa, tn., N. Caucasian Area, Russia, on Black Sea; oil refineries. Pop. 12,500.

Tuat, or **TWAR**, Berber name applied to oases in W. Sahara, Africa; more particularly to fertile region in valley of Wadi Saura; included in Algeria; dates, barley, wheat, cotton, and tobacco. Pop. c. 50,000.

Tübingen, tn., Württemberg, Germany, on R. Neckar; univ. (1477); 16th cent. castle; printing, dyeing, chemical manufacture, making of scientific instruments. Pop. 20,500.

Tubuai (*too-boo-ä'ē*), or **AUSTRAL ISLANDS**, group of French islands in Pacific Ocean, s. of Society Islands. Area, 115 sq. m.; pop. 3,500.

Tucson (*too-son*), city, s. Arizona, U.S.A., on Santa Cruz R.; seat of univ. of Arizona; rly. workshops; gold, silver, and copper smelting industries; stockyards. Pop. 32,000.

Tucuman (*too-koo-mān*). (1) Prov., N. Argentina; well wooded; mountainous towards the n.w.; sugar. Area, 10,422 sq. m.; pop. 418,000. (2) Cap. of above, 90 m. n.w. of Santiago del Estero; univ.; breweries, sawmills, flour mills, sugar factories, and tanneries; trade in oxen and mules. Pop. 91,500.

Tudela (*too-dā'la*), city, Navarra, N. Spain, on R. Ebro; cathedral; timber industries. Pop. 10,500.

Tudhoe (*tud'ō*), par., Durham, England, 5 m. n.e. of Bishop Auckland; ironworks and collieries. Pop. 7,900.

Tugela (*too-gā'la*), riv., Natal, S. Africa; rises in Drakensberg Mts., and flows e. and s.e. past Colenso and Ladysmith to Indian Ocean; scene of much fighting during S. African War (1900). Length, 300 m.

Tuggurt (*too-goort'*), terr., Algeria; comprises dists. of Biskra and Tuggurt. Tn. of Tuggurt in oasis of Sahara desert; large trade in dates. Pop. (terr.) 213,000; (dist.) 95,000; (tn.) 12,000.

Tughina (*too-gā'nā*) (Turkish *Ben-der*), tn., Bessarabia, Romania, on R. Dniester; timber and sawmills. Pop. 36,500.

Tuguegarao (*too-gā-gā-rā'ō*), tn., N. Luzon I., Philippines; tobacco. Pop. 19,500.

Tu'la. (1) Prov., central Russia, in R. Don basin; agriculture; coal deposits; metal wares. Area, 9,700 sq. m.; pop. 1,500,000. (2) Cap. of above; iron foundries and factories for arms, machinery, and metal articles of all kinds; tanneries; flour mills. Pop. 150,000.

Tulcea (*loo'chā*), riv. port, Dobruja, Romania, on R. Danube; grain, wool, and fish. Pop. 28,000.

Tullamore, co. tn., Offaly, I.F.S., on Grand Canal; distilling and brewing; agricultural produce. Pop. 5,000.

Tulle (*tool*), chief tn., Corrèze, central France; cathedral; small-arms factory. Pop. 10,500.

Tul'low, mkt. tn., Carlow, I.F.S., on R. Slaney; grain and butter. Pop. 1,600.

Tul'sa, city, Oklahoma, U.S.A., on Arkansas R.; oilfields; grain and live-stock region. Pop. 141,000.

Tumkur (*loom-koor*), hill station, Mysore, India, 40 m. n.w. of Bangalore. Pop. 14,500.

Tum'mel, riv., Perthshire, Scotland; rises near Glencoe, and flows e. through Lochs Rannoch and Tummel to join R. Tay at Ballinluig; trout and salmon. Length, 60 m.

Tun'bridge Wells, ROYAL, inland wat.-pl., Kent and Sussex, England, 4 m. s. of Tonbridge; chalybeate springs; fine promenade (the Pantiles); manufactures wooden (inlaid) ware. Pop. 35,400.

Tung-chow, city, Hopeh, China, on Pei-ho, 15 m. e. of Peking; starting-place for tea caravans to Siberia. Pop. c. 50,000.

Tung Keng, largest of s. Shan States, Burma; mountainous; drained to Mekong and Salween rvs.; rice, sugar-cane; teak. Chief tn., Tung Keng. Area, 12,400 sq. m.; pop. 210,000.

Tu'nis, cap., Tunisia, N. Africa; connected with Mediterranean Sea at La Goulette by canal; Mohammedan univ.; important trading centre; manufactures silk and woollen textiles, pottery, leather; exports olive oil, cereals, cattle and hides, ores,

dates, gems. Founded by Carthaginians; ruins of Carthage near by. Pop. 186,000.

Tunis'ia, French protectorate, N. Africa; bounded n. by Mediterranean, w. by Algeria, s. by Sahara, e. by Libya and Mediterranean; consists of five regions: (i.) mountainous n. (Atlas Mts.) with rich Mejerda valley; (ii.) n.e. with orange and lemon groves; (iii.) Sahel, e. coast region, olives; (iv.) central tableland (average elevation c. 2,000 ft.), pastures; (v.) Sahara in s., containing famous dried-up salt lakes (largest, Shott Kebir); country around lakes is known as Belad-el-Geriad (land of dates). Climate hot, but healthy; ann. temp., 60° to 90° F.; winter rainfall 10 to 50 in., heaviest in n.; principal products and exports, cereals, minerals and metals, hides, olives, dates, wines, esparto grass, henna, cork, fruits, tobacco; manufactures morocco leather, pottery, carpets, rugs, and woollen fabrics; extensive fisheries (tunny, sardines, sponges); iron, lead, and zinc mined; valuable phosphates; numerous hot springs; pop. consists mainly of Bedouin Arabs, Kabyles, and Jews (54,500); European pop. 173,500 (Italians, 90,000; French civilians, 71,000; Maltese, 8,500). Cap. Tunis. Area, c. 50,000 sq. m.; pop. 2,160,000.

Tun'sall, tn., Staffs, England; bricks and tiles; now included in Stoke-on-Trent. Pop. 23,000.

Turcoman. See **TURKMEN**.

Turin (Italian *Torino*), tn., Piedmont, Italy, on R. Po; 15th cent. Gothic cathedral; univ. (founded 1404); important rly. and military centre; manufactures silk, woollen goods, paper, cotton, linen, leather, motor-cars and aeroplanes; cap. of kingdom of Savoy till 1860, and for five years thereafter of Italy. Pop. 591,000.

Tur'key, rep., Europe and Asia, consisting of E. Thrace with Constantinople, and whole of Asia Minor, s. shores of Sea of Marmara, the Bosphorus, and the Dardanelles; in Europe n. boundary runs roughly E.,

and w. boundary roughly s. along R. Maritsa, from Adrianople. In Asia, Turkish terr. is bounded on n. by Black Sea and Georgia, on e. by Armenia and Persia, and on s. by Iraq and Syria. Chief religion of Turkey is Mohammedanism. Chief tns. in European Turkey, Constantinople, Adrianople; in Asia Minor, Angora (cap. of all Turkey), Smyrna, Scutari, Adana, Brusa, and Konia. Area, 294,416 sq. m.; pop. 13,648,500. See **ASIA MINOR**.

Turkistan. (1) General name for extensive region of central Asia; Chinese terr. formerly E. Turkistan is described under Sinkiang; present Turkistan includes Uzbek, Turkmen, Tajik, Kazak, and Kirghiz reps. of U.S.S.R., situated between Caspian Sea and Pamir plateau; partially overrun by Mongols in 11th cent., formed part of Tamerlane's empire in 14th cent., and later was carved into independent states; came under Russian control in 19th cent. (2) Or **HAZRET**, tn., Kazak rep., U.S.S.R., on R. Sir Darya; cotton industry; wool market; Mohammedan pilgrim resort. Pop. 22,000.

Turkmen, or **TURCOMAN**, rep., Asia, U.S.S.R., s.e. of Caspian Sea; drained by R. Atrek to Caspian Sea, R. Oxus to Aral Sea, and R. Murghab in s.; mainly desert with oases; silk and fruit; live-stock. Chief tns., Ashqabad (cap.), Merv, and Krasnovodsk. Area, 189,603 sq. m.; pop. 1,030,000.

Turks and Caicos Islands. See **CAICOS AND TURKS ISLANDS**.

Tur'ku, formerly Åbo, port, Finland, on Gulf of Bothnia; shipbuilding; exports timber, dairy produce, grain. Pop. 61,000.

Turnhout (*toor-nout*), tn., Belgium, 25 m. E.N.E. of Antwerp; textiles, paper, lace. Pop. 25,500.

Tur'nu-Severin, riv. port, Romania, on R. Danube, 10 m. E. of Orsova; exports grain, salt, petroleum; remains of bridge built by Trajan and of tn. erected by Severus; large govt. shipyards. Pop. 31,000.

Tur'riff, burgh, Aberdeenshire, Scot-

land, 12 m. s. of Macduff; anc. tn.; the 'Trot of Turriff' (1639) was fought between Covenanters and Royalists. Pop. 2,300.

Turton, urb. dist., Lancs, England, 4 m. N. of Bolton; manufactures cotton; stone quarries. Pop. 11,800.

Tuscany, w. central dep., Italy; comprises nine provs.—Arezzo, Florence, Leghorn, Grosseto, Lucca, Massa-Carrara, Pisa, Pistoia, and Siena; Apennines to N. and E.; chief riv. Arno; wheat, maize, wine, olive oil, chestnuts; copper, lead, iron ore, mercury, marble, salt, lignite; mineral and hot springs; industries include textiles, porcelain, and straw hats; cradle of Italian language and literature. Principal tns., Florence, Siena, Pisa, Leghorn. Area, 8,890 sq. m.; pop. 2,886,000.

Tuskegee (*tus-ke'-gee*), tn., Alabama, U.S.A., on Tuskegee R., 38 m. E. of Montgomery; seat of Tuskegee Normal and Industrial Institute, founded (1881) by Booker T. Washington for education of Negroes. Pop. 2,500.

Tutbury, tn. and par., Staffs, England, on R. Dove, 9 m. S.W. of Derby; ruins of castle; manufactures glass; alabaster found in vicinity. Pop. (par.) 2,000.

Tuticorin, port, Madras, India, on Gulf of Manaar, 65 m. N.E. of Cape Comorin; cotton spinning, and manufacture of salt; passenger port for Ceylon; pearl fisheries. Pop. 44,500.

Tuttlingen (*toot'-ling-en*), tn., Württemberg, Germany, on R. Danube, 28 m. N.W. of Konstanz; manufactures cutlery, shoes, and woollens. Pop. 16,000.

Tuy (*too'-ē*), tn., Pontevedra, Spain, on R. Minho, on Portuguese frontier; cathedral; preserve manufactures; hot mineral springs. Pop. 13,000.

Tur'la, tn., Bosnia, Yugoslavia, on R. Jala, 47 m. N. of Sarajevo; salt springs; manufactures soda; trade in timber, coal, bricks, live-stock, fruit, and grain. Pop. 13,000.

Tver. (1) Province of central Russia; level plateau containing watershed between Rs. Volga, W.

Dvina, and Msta; numerous lakes and marshes; one-third of prov. covered by coniferous forest; rye, oats, and potatoes are cultivated; dairy farming is extending. Area, 24,438 sq. m.; pop. 2,239,000. (2) Cap. of above, on Upper R. Volga; cathedral; cotton, sailcloth, linen, earthenware, leather, and machinery; river port and important distributing centre. Pop. 106,000.

Tweed, principal riv., S.E. Scotland; rises in Peeblesshire (1,500 ft.); flows N.E. past Peebles, Melrose, and Kelso; forms boundary between England and Scotland, and enters North Sea at Berwick; chief tribs., Gala, Ettrick, Leader, Teviot, and Whiteadder; valuable salmon fisheries; length, 97 m.

Tweedmouth, port, Northumberland, England, on R. Tweed, suburb of Berwick-upon-Tweed; salmon fishing, fish curing; ironfounding, engineering. Pop. 5,000.

Twenty-four Parganas', THE, dist., Bengal, India; part of Ganges Delta, including most of Sundarbans; partly forested, partly cultivated; rice, jute, pulses. Area, 4,856 sq. m.; pop. 2,628,000.

Twickenham, residential suburb of Greater London, England, on R. Thames, 2 m. S.W. of Richmond; fashionable resort in 18th cent.; river-fishing centre. Pop. 39,900.

Twyford, par. and vil., Hants, England, on R. Itchen, 3 m. S. of Winchester; Alexander Pope educated here; venerable yew tree in churchyard. Pop. (par.) 2,215.

Tyldesley with Shakerley (*tild'-le*), urb. dist., Lancs, England, 10 m. W. of Manchester; cotton manufactures; foundries, collieries. Pop. 14,800.

Tyler, city, Texas, U.S.A., 93 m. E.S.E. of Dallas; centre for fruit, live-stock, cotton. Pop. 12,000.

Tyne (*tin*), riv., England, formed by junction of N. and S. Tyne, 2 m. S.W. of Hexham Bridge; flows E. past Newcastle to enter North Sea at Tynemouth. Shipbuilding yards and engineering works line its banks. Length, 80 m.

Tynemouth (*tin'muth*), co. bor., port, and wat.-pl., at mouth of R. Tyne, Northumberland, England, 8 m. N.E. of Newcastle; includes North Shields; shipbuilding; harbour sheltered by two piers; fisheries; ropes and sails. Pop. 64,900.

Tyre (*tir*) (modern *Sur*), tn., Great Lebanon, Syria, on Mediterranean Sea; ancient city of Phœnicia; one of most flourishing maritime cities of ancient times; famous for purple dyes.

Tyre (*tir-ē*), or **TREE**, isl., Inner Hebrides, Argyllshire, Scotland, 19 m. N.W. of Iona; treeless, flat; several fresh-water lakes; horses bred. Area, 30 sq. m.; pop. 1,700.

Tyrol. See **Tirol**.

Tyrone (*tī-rōn*). (1) Inland co.,

N. Ireland; surface mostly hilly, rising into mts. in N. and S.; fertile and well-cultivated in low-lying dists.; watered by rivs. Foyle and Blackwater; agriculture and cattle rearing; coal and marble; linens and coarse woollens manufactured. Cap. Omagh. Area, 1,218 sq. m.; pop. 133,000. (2) Tn., Pennsylvania, U.S.A., 95 m. E. by N. of Pittsburgh; in agricultural and lumber region; iron deposits. Pop. 9,000.

Tyumen', tn., Ural Area, Russia, on R. Tura; on rly. between Perm and Omsk; leather, carpets. Pop. 50,500.

Tywardreath', par. and vil., Cornwall, England, 5 m. N.E. of St. Austell; Roman camp and old priory in vicinity. Pop. (par.) 2,500.

U

Ubangi, or **MOBANGI**, riv., Africa, formed by union of Rs. Mbomu and Uele; chief N. trib. of R. Congo; length, 1,400 m.

Ubeda (*oo-bū'dā*), tn., Jaen, s. Spain, on plain between R. Guadalquivir and its trib. Guadalimar; trade in soap, oil, and agricultural produce. Pop. 20,000.

Uck'field, urb. dist., Sussex, England, 8 m. N.E. of Lewes; malting and brewing; trade in corn and timber. Pop. 3,600.

Udaipur (*oo-dī-poor'*), or **MEWAR**. (1) Indian state, s. Rajputana, India; maize, cotton, sugar-cane, wheat, poppy. Area, 12,756 sq. m.; pop. 1,380,000. (2) Cap. of above; very picturesque; royal palace on margin of Pichola lake; embroidery, cotton cloth, swords. Pop. 35,000.

Ud'dinston, tn., Lanarkshire, Scotland, 7 m. S.E. of Glasgow, of which it is a residential suburb; agricultural implements, machinery, jam, and confectionery. Pop. 8,400.

Udine (*oo-dē-nā*), tn., Italy, 85 m. N.E. of Venice; silks, linens, leather. Pop. 56,000.

Ufa (*oo'fa*), chief tn., Bashkir, E. Russia, on R. Ufa, c. 250 m. N.E. of Samara; important agricultural market; iron and copper works; saw-mills, flour mills, and breweries. Pop. 97,000.

Uganda (*ū-gān'dā*), inland British protectorate, E. Africa, bounded N. by Anglo-Egyptian Sudan, E. by Kenya, S. by Tanganyika Terr., W. by Belgian Congo. Surface is plateau, over 3,000 ft., with mountains in S. and W. rising to 20,000 ft.; chief river is Nile; lakes include part of Victoria, Edward, Albert, and Rudolf, and whole of Kioga. Climate tropical; healthy in higher regions to S. and W.; malaria prevalent in lower dists.; soil in general very fertile. S. dists. abound with magnificent timber; swamps are rank with papyrus, rushes, reeds, and coarse grass. Tropical forest fringes margin of L. Victoria. Products are cotton, rubber, cocoa, coffee, oil-seeds, ivory, hides, and skins. Uganda has an excellent system of roads. Uganda Rly. runs from Mombasa to the Nile, passing through the cotton area, for which it provides an outlet. Uganda

is divided into four provs.: (1) Buganda, on w. shores of Lake Victoria; (2) W. prov., on w. boundary; (3) N. prov., along w. to n. boundary; (4) E. prov., lying e. of Buganda. Chief tns., Entebbe (cap.), and Kampala. Area, 94,204 sq. m.; pop. 3,157,000, including 1,870 Europeans.

Uig (oo'ig), par., s.w. Lewis, Outer Hebrides, Ross and Cromarty, Scotland; contains islands of Bernera and Flannan. Pop. 4,000.

Uist (oo'ist), NORTH and SOUTH, two islands, Outer Hebrides, Inverness-shire, Scotland; inhabitants mainly crofter-fishermen. Pop. N. Uist, 2,600; S. Uist, 3,200.

Uitenhage (oi-ten-hā'gā), tn., Cape Prov., S. Africa, 21 m. n.w. of Port Elizabeth; railway works; wool-washing industry; irrigated fruit and flower nurseries; summer resort. Pop. 14,000.

Ujiji (oo-jē'jē), tn., on Lake Tanganyika, Tanganyika Terr.; at terminus for rly. from Dar-es-Salaam; trading centre for ivory; here Stanley found Livingstone (1871). Pop. c. 25,000.

Ujjain (oo'jin), sacred city, Gwalior, central India, 32 m. n. of Indore; exports opium; prime meridian of Hindu geographers runs through it. Pop. c. 40,000.

Ukraine, rep., U.S.S.R.; bounded n. and e. by other units of U.S.S.R., s. by Crimea and the Black Sea, w. by Rumania and Poland; surface marshy in n., low plateau in s.; chief rivers are Dnieper, Dniester, Bug, and Donetz, trib. of Don. Climate continental; rain mainly in summer. Very fertile soil; c. 80 per cent. of population engaged in agriculture; maize, wheat, barley, rye, and oats are chief crops; sugar-beet, potatoes, tobacco, also grown. Stock raising is important, particularly sheep and pigs. Among minerals found are coal from Donetz valley; iron ore, manganese, mercury, salt. Manufactures include flour milling, sugar refining, brewing, distilling, and tobacco; metal smelting, chemical industries, brick and

pottery manufacture. Chief tns., Kharkov (cap.), Kiev, Dnepropetrovsk, Stalingrad, and the Black Sea ports, Odessa, Kherson, and Nikolaev. Area, 166,368 sq. m.; pop. 29,000,000.

Ulcinj (ool'siny), formerly DUTCIGNO, tn., Yugoslavia, on Adriatic; tobacco growing; olive oil; fishing and boat building. Pop. 3,000.

Uleåborg (ool'ä-ö-bor). See OULU.

Ulianov, formerly SIMBIRSK, prov., Russia, situated to w. of middle R. Volga; consists of an extensive and fertile plain, but broken and hilly in s. and s.w.; drained by Volga and tributaries; has deposits of bituminous shale, asphalt, salt, iron ore, and ochre; chief occupation is agriculture, and products include maize, rye, oats, and vegetables; chief industries: woollen manufacture, distilling, brewing, and flour milling. Chief tn., Ulianovsk. Area, 13,500 sq. m.; pop. 1,381,000.

Ulianovsk, cap. of Ulianov prov., Russia; river port on R. Volga; brewing, tanning, iron and copper foundries, flour mills. Pop. 70,000.

Ullapool, vil., Ross and Cromarty, Scotland, on Loch Broom; fishing; safe and spacious harbour. Pop. 600.

Ullswater. See LAKE DISTRICT.

Ulm (oolm), city, Württemberg, Germany, on R. Danube; magnificent Gothic cathedral with famous spire; cottons, linens, woollens, leather, tobacco, cement, machinery; flour milling, distilling. Pop. 57,000.

Ulster, prov. in n. of Ireland, consisting of cos. of Antrim, Armagh, Down, Fermanagh, Londonderry, Tyrone (now N. Ireland) and Cavan, Donegal, Monaghan (now in I.F.S.); a flourishing industrial region; manufactures are linen, muslin, and iron goods; shipbuilding and distilling are important; bauxite and rock salt worked in Antrim; mainly Protestant in religion. Area, 8,330 sq. m.; pop. 1,556,000.

Ulverston, mkt. tn. and urb. dist., on Morecambe Bay, Lancs, England; ironworks, chemical works, breweries. Pop. 9,200.

Uman (*oo-mán'*), town, Ukraine, U.S.S.R., 40 m. s. of Kiev; iron foundries, flour mills, distilleries. Pop. 44,000.

Umballa. See AMBALA.

Umbria, dep. of central Italy, comprising provs. of Perugia and Terni; mountainous, with fertile valleys and good pasturage; contains many objects of artistic and architectural interest. Area, 3,377 sq. m.; pop. 639,000.

Unalaska. See under ALEUTIAN ISLANDS.

Unao. (1) Dist., United Provinces, India; undulating upland; cereals, poppy, sugar-cane. Area, 1,787 sq. m.; pop. 819,000. (2) Cap. of above, 10 m. n.e. of Cawnpore; has thriving local trade. Pop. 11,000.

Ungava (*ung-gá'va*). (1) Terr., Quebec, Canada, occupies n.w. of Labrador peninsula; treeless in n.; numerous lakes; iron, copper, gold, and nickel occur. Area, 351,780 sq. m. (2) BAY, large inlet, n. Labrador, leading into Hudson Strait; shallow; ice-free in summer, when cod-fishing takes place. Length, 150 m.; breadth, 130 m.

Union, or TOKELAU, group of Brit. islands in Pacific, n. of Samoa; administered by the Commissioner of Western Samoa. Area, 7 sq. m.; pop. 1,000.

Union City, tn., New Jersey, U.S.A., on Hudson R., opposite New York; silk goods. Pop. 59,000.

Union of Socialist Soviet Republics (U.S.S.R.), official title of the state formed out of the old Russian Empire. It comprises seven republics: Russian Socialist Federal Soviet Republic (Russia proper), Ukraine, White Russia, Transcaucasia, Uzbek, Turkmen, and Tadzhik Socialist Soviet Republics. Within these there are 15 Autonomous Republics and 14 Autonomous Areas. The most important of the Autonomous Republics are the following in the Russian Socialist Federal Soviet Republic: Bashkir, Tatar, Kirghiz, Daghestan, Crimea, Yakutsk, Karelia, Buriat-Mongolia,

Kazak. Cap. Moscow. Total area, 8,242,000 sq. miles; total pop. 147,000,000. See separate articles on these states, and for the Russian Socialist Federal Soviet Republic consult articles on Russia and Siberia.

Uniontown, town, Pennsylvania, U.S.A., 40 m. s. of Pittsburgh; foundries and machine shops; lumber and flour mills. Pop. 16,000.

United Kingdom, former official title for 'United Kingdom of Great Britain and Ireland'; now sometimes used politically to mean Great Britain and N. Ireland, and geographically to mean the British Isles.

United Provinces of Agra and Oudh, prov., British India; bounded by Tibet, Nepal, Bihar and Orissa, Central India, Rajputana, and the Punjab. Surface generally plain, with Himalayas on n. boundary; watered by R. Ganges, with Jumna and other affluents. Agriculture is extensively carried on assisted by irrigation; chief food-growing prov. in India; chief crops, wheat, rice, millet, barley, maize, and pulse, while cotton, sugar-cane, opium-poppy, and oil-seeds are also cultivated. Densely populated. Chief tns., Allahabad (cap.), Lucknow, Benares, Cawnpore, Agra, Meerut. Area, 106,295 sq. m.; pop. c. 45,500,000.

United States of America, federal rep., N. America; bounded n. by Canada, e. by Atlantic, s. by Gulf of Mexico and Mexico, and w. by Pacific; Alaska to n.w. of Canada is a detached terr. Surface is divided into three natural regions: (1) Appalachian Mts. along e. coast, with coastal plain (200 m. wide); (2) Central Plains, which are divided into Gulf Plain extending inland from Gulf of Mexico, Prairies n. of Gulf Plain stretching to Great Lakes, and Great Plains at a higher elevation, w. of Gulf Plains and Prairies. Central Plains occupy largest area of country, and are broken by Ozark Mts. between Gulf Plain and Great Plains; (3) Rocky Mt. system in w., of great elevation (extreme height, 14,898 ft.). The n.e. is drained by

streams flowing to Great Lakes and R. St. Lawrence; coastal strip by Penobscot, Connecticut, Hudson, Delaware, Susquehanna, Potomac, James, Roanoke, Savannah; Central Plain by Mississippi-Missouri system, Alabama, Sabine, Trinity, flowing direct to Gulf of Mexico; s.w. by Rio Grande del Norte (flowing into Gulf of Mexico) and Colorado into Gulf of California; n.w. by Columbia, which breaks across coast mountains.

The great rivers of Central Plain are navigable for long distances; R. Hudson is navigable, but other n. rivers are chiefly important for power and harbour purposes; w. rivers mostly flow through deep gorges (cañons), and, except R. Columbia, are of no commercial importance. E. coast as far s. as Long I. is rocky, with many good harbours; farther s. it is low and sandy, and broken only by great openings of Delaware and Chesapeake Rs.; along Gulf of Mexico it is low and swampy, while near middle R. Mississippi delta projects some 50 m. out to sea. The long line of w. cliffs is broken only in extreme n., and near centre, at Golden Gate, San Francisco.

Climate varies from winter snows and cold of central n. to mildness of Pacific slopes and sub-tropical conditions of s. and s.e. Greatest range of temperature is in interior, and is much greater on n.e. coast than on Pacific Coast. Rainfall in e. half varies from over 60 in. in s. to 20 in. n.; in w. half it decreases to 15 in. at base of Rocky Mts.; along Pacific coast-strip it is abundant in n. and scanty in s.; some parts of w. hills and w. plateau are desert.

Agriculture is chief industry, but others are increasing rapidly in importance. Of country e. of 100° long., nearly two-thirds is under crop—n. districts producing crops of ordinary grains and green crops, centre maize and tobacco, s. cotton, with rice and sugar-cane in much smaller proportion on shores of Gulf of Mexico. Chief grain crops are maize, wheat, and

oats; barley, flax, rye, buckwheat, and rice are also important crops. Chief wheat-growing states lie in a central strip and in n.w. Chief maize-producing states lie s. and w. of Great Lakes. Great cotton states are in s.e.; area under cotton is over 45,000,000 ac. Chief tobacco states lie roughly n. of cotton belt. Sugar-cane is grown in Louisiana, Georgia, etc.; over 1,000,000 ac. (chiefly in Louisiana and Texas) are under rice. Vines succeed best in California. Among temperate fruits are apples, peaches, plums, and pears; many tropical and sub-tropical fruits are cultivated in California and several s. states. Stock rearing is important in w. half of country (chiefly cattle, pigs, sheep, horses), the crops being produced chiefly for feeding. There are great tracts of forest land on the Atlantic side, the Pacific coast, the Rocky Mts., and W. Central States, occupying about one-fifth of whole country. Salmon fishing of w., fisheries of Grand Bank of Newfoundland and Alaska, and whale and seal fishing are exceedingly valuable.

Minerals are also of very great importance. Over two-thirds of world's petroleum is produced in U.S.A.; other important minerals include gold, silver, copper, lead, zinc, aluminium, iron, coal, and natural gas. Manufactures are very important in n.e., especially in states of New York and Pennsylvania; the cotton factories of s. are developing rapidly. Textiles and iron and steel goods of all kinds are manufactured. Leading exports in order of value are: iron and steel ore and goods, wheat and flour, raw cotton, mineral oils, cotton goods, and tobacco; meat and dairy products.

The densely populated states have a network of convenient railway communications. An enormous amount of traffic is carried on Great Lakes and on canals connected with them—Sault Ste. Marie, Erie, Hudson R., Hudson and St. Lawrence, Ohio to Susquehanna, and Lake Michigan to the Mississippi, etc. The Mississippi

Missouri river system is navigable for nearly 14,000 m. Washington is cap.; largest tns. are New York, Chicago, Philadelphia, and Detroit. Area of the U.S.A. (excluding Alaska), 3,026,789 sq. m.; pop. 105,710,000. Indian reservations cover 47,000 sq. m., with pop. of 355,000; there are over 10,000,000 Negroes.

University City, city, Missouri, U.S.A., close to St. Louis, of which it is a residential suburb; seat of Washington University. Pop. 26,000.

Unst, most n. of Shetland Islands, Scotland; fishing and agriculture; Shetland hosiery. Pop. 1,800.

Unterwalden (*oon'ter-väl-den*), canton, Switzerland, s.w. of L. Lucerne; divided into Obwalden and Nidwalden. Surface mountainous, reaching c. 10,600 ft. in Mt. Titlis; drained by R. Aa, flowing into L. Lucerne. Dairy farming carried on; fruit cultivated and live-stock raised. Chief tn. of Obwalden is Sarnen; of Nidwalden, Stans. Area, 296 sq. m.; pop. 31,000.

Upernivik. See GREENLAND.

Up'hall, par. and vil., West Lothian, Scotland, 3 m. n.w. of Mid Calder; sandstone quarries, coal mines, shale mines; paraffin works. Pop. (par.) 12,500.

Uphol'land, urb. dist., Lancs, England, 4 m. w. of Wigan; coal mines, quarries. Pop. 5,500.

Up'ington, tn., Bechuanaland, S. Africa, on Orange R.; copper ore in vicinity; ostrich farming. Pop. 1,700 whites.

Upper Vol'ta, colony, French W. Africa, within bend of R. Niger, n. of Ivory Coast, Gold Coast, Togo, and Dahomey; drained by R. Volta and tribs. cattle; ground-nuts, millet, maize, cotton, rubber. Cap. Ouagadougou. Area, c. 142,000 sq. m.; pop. 3,000,000.

Up'ingham, mkt. tn., Rutlandshire, England; has famous public school (1584). Pop. (of dist.) 5,300.

Uppsala (*up'sa-la*), city, Sweden, 40 m. n. of Stockholm; seat of an archbishop (primate of Sweden) and of a univ. (1477); cathedral (1260)

contains monuments of many Swedish kings and of Linnaeus. Pop. 30,000.

Upton-on-Severn, mkt. tn., Worcestershire, England; has considerable river trade. Pop. 2,000.

Ur, anc. city (*Ur of the Chaldees*), Iraq, near anc. confluence of Euphrates and Tigris rvs., 110 m. w. of Basra; formerly a caravan market; supposed birthplace of Abraham; change of course of Euphrates left Ur in desert; uninhabited since 350 B.C.; scene of excavations from 1918.

Ural (*oo-räl'*), riv., European Russia, rises in s. Ural Mts.; flows s. to enter Caspian Sea through delta; navigable to Orenburg; fisheries below Uralsk. Length 1,400 m.

Ural Area (*oo-räl'*), administrative division of Russia; partly in Europe, partly in Asia; bounded on e. by Siberian Area, s. by Kazak Republic, n. by Arctic Ocean, and w. by Bashkir Republic, Votia Terr., and Viatka Prov. Ural Mts. lie almost entirely within its borders. Its w. rivers, particularly the Kama and its tributaries, link the region with the Volga river system, and by canals with Leningrad. Eastward it drains to R. Ob and Arctic Ocean. Mining is an important industry, iron, copper, gold, platinum, salt, phosphates, and precious stones being obtained. Among chief industries are smelting; manufacture of machinery; china, glass, cement, leather, flour, and tobacco. Agriculture is relatively unimportant. Crossed in s. by railway line linking Perm, Sverdlovsk, and Tyumen. Cap. is Sverdlovsk. Area, 653,424 sq. m.; pop. 6,792,000.

Ural Mountains (*oo-räl'*), mountain system forming boundary between Europe and Asia, with a total length of c. 1,650 m.; average height, 1,200-1,500 ft., reaching extreme height of 5,500 ft. in n. Rich in minerals—gold, copper, iron, platinum, silver, coal, salt, malachite, precious stones. Many large forests on slopes.

Uralsk (*oo-rälsk'*), cap. of Ural Province, Kazak, U.S.S.R., on Ural R.; trade in cattle; manufactures flour,

leather, iron, and woollen goods. Pop. 36,000.

Urbino (*oor-bē'nō*), tn., Marche, Italy, 45 m. n.w. of Ancona; modern cathedral; old churches; ducal palace containing fine art collections; birthplace of Raphael; cheese, silks, olive oil. Pop. 20,000.

Urfa, modern name for anc. city of EDESSA, S.E. Asia Minor, 90 m. s.w. of Diarbekr; interesting archaeological remains; modern city is an important trade centre; cotton and grain. Pop. c. 100,000.

Urga (*oor'ga*), city, N. Mongolia; religious and commercial centre. Pop. c. 40,000.

Uri (*oor'ē*), canton, Switzerland, running s. from L. Lucerne; comprises upper valley of R. Reuss, and is traversed by St. Gotthard Rly.; stock and dairy farming. Cap. Altdorf. Area, 415 sq. m.; pop. 24,000.

Urmia (*oor-mē-a*). (1) Tn., Azerbaijan, n.w. Persia, 64 m. s.w. of Tabriz; a flourishing tn. before Great War, exporting raisins and molasses, and centre of large agricultural trade. Owing to massacre and exodus of Christians during the War its importance declined. Attempts are being made to restore its prosperity. (2) Salt lake, n.w. Persia; has no visible outlet; length, 80 m.; breadth, from 30 to 45 m.

Urmston, urb. dist., Lancs, England, 5½ m. w.s.w. of Manchester; residential. Pop. 9,300.

Uruguay (*oor-roo-gwi'*). (1) Republic, S. America, n. of Rio de la Plata; bounded n.e. by Brazil, s.e. by Atlantic, s. by the R. Plate, and w. by Argentina. Surface is flat grass-land, with low ridges of hills in n.; drained by Rio Negro and other tribs. of Uruguay R. Climate is healthy; mean ann. temp. 61° F.; ann. rainfall, 35 in. Principal industry is rearing of cattle and sheep; extensive exports of meat, wool, and animal products. Wheat is chief crop; grapes, olives, and tobacco are grown. Minerals include gold, copper, lead, silver, lignite, but mining is only of slight impor-

tance. Chief tns., Montevideo (cap.), Paysandu, Saeto, Mercedes. Area, 72,153 sq. m.; pop. 1,808,000. (2) Riv., S. America; rises in Sierra do Mar, s.e. Brazil; flows w. and s., divides Argentina from Brazil and then from Uruguay; flows into Rio de la Plata; navigable to cataract at Salto. Length, c. 1,000 m.

Uruguayana (*oor-roo-gwi-ā'nā*), tn., Rio Grande do Sul, Brazil, on R. Uruguay; centre of grazing industry. Pop. 21,000.

Urumtsi (*oor-room'tsē*), cap. of Sinkiang, China; in valley of Tien Shan Mts.; trade in furs and skins. Pop. c. 50,000.

Usedom (*oo'se-dom*), isl., Pomerania, Prussia, at mouth of R. Oder; with Wollin I. separates Stettiner Haff from the Baltic; summer resort; agriculture, forestry, fishing. Area, 158 sq. miles.

Ushak (*oo-shak'*), tn., Asia Minor, 125 m. E. of Smyrna; famous for carpets. Pop. 89,000.

Ushant (French *Ouessant*), isl., Finistère, France; most w. part of France; marks entrance to English Channel; fishing; important wireless station. Pop. 2,500.

Usk. (1) Tn., Monmouthshire, England, on R. Usk; agricultural centre. Pop. 1,300. (2) Riv., S. Wales and Monmouthshire, England; flows into estuary of Severn; salmon fisheries; length, 60 m.

Uskub. See SKOPLJE.

Usti nad Labem (*oo'stē*), formerly AUSSIG, tn., Czechoslovakia; 45 m. n. by w. of Prague; at confluence of Rs. Bela and Elbe; chemical works and coal mines. Pop. 40,000.

Ustyug - Velikiy (*oo's-te-oog'-vā-lē'hē*), tn., N. Russia, on R. Sukhona, trib. of N. Dvina; brewing, distilling, timber, leather. Pop. 19,000.

Us'worth, par., Durham, England, 4 m. s.e. of Gateshead; extensive coal mines. Pop. 8,000.

U'tah, inland mountain state, U.S.A., lies among western ridges of the Rocky Mts.; bounded by Idaho, Wyoming, Colorado, Arizona, and

Nevada; Wasatch Mts., which run roughly n. and s., reach c. 13,000 ft., and the Uinta range in n.e. rises to c. 14,000 ft.; in n.w. is Great Salt Lake; watered by Colorado R. and tribs., and by R. Sevier and other streams. Climate extreme in mountainous districts, healthy and temperate in valleys; rainfall very small and irregular. Agriculture carried on in fertile regions where water is obtainable; chief crops, wheat, oats, potatoes, hay; sugar-beet is an important product. Fruits and vegetables are grown; horses, cattle, sheep, and pigs reared. Minerals include copper, silver, lead, gold, coal. Industries of importance are copper refining, flour milling, fruit canning, and the manufacture of boots and shoes, sugar, cheese, and butter. Chief tns., Salt Lake City (cap.) and Ogden. Area, 84,990 sq. m.; pop. 449,000.

Utica, city, New York, U.S.A., on R. Mohawk; manufactures cotton goods, hosiery, clothing, boots and shoes. Pop. 103,000.

Utrecht (*oo-trech't*), city, Holland, in R. Rhine delta, 22 m. s.e. of Amsterdam; strong fortress; intersected by two canals. Many fine buildings. Treaty of Utrecht signed here (1713). Chief industries are

printing, machinery, chemicals, woollens, silks, velvets, tobacco, cigars, plate glass. Pop. 151,000.

Utrera (*oo-tré'ra*), city, Spain, 16 m. s.e. of Seville; 14th cent. church; productive region, rich in grain and fruit. Pop. 21,000.

Uttor'eter, urb. dist. and mkt. tn., Staffs, England, 13 m. n.e. of Stafford; agricultural implements; quarries marble. Pop. 5,900.

Uxbridge, urb. dist. and mkt. tn., Middlesex, on R. Colne; part of Greater London. Pop. 31,900.

Uzbek, Asiatic rep., U.S.S.R.; bounded s. by Afghanistan, w. by Turkmen, n. by Kazak, and e. by Tadzhik; mainly plateau with extreme climate and scanty rainfall; watered by Sir Darya and Oxus rivers; soil fertile under irrigation; cotton and rice are chief products, also wheat, maize, barley, and fruits; live-stock reared; naphtha, coal, iron, silver, lead, and copper are found, but are little exploited. Cap., Samarkand. Area, 131,394 sq. m.; pop. 5,270,000.

Uzhorod (*oozh-hor-ot*), formerly UNGVAR, tn., Czechoslovakia, on w. border of Ruthenia; has trade in timber; manufactures pottery and wine. Pop. 21,000.

V

Vaal (*vāl*), riv., S. Africa; rises in Drakensberg Mts.; flows w. and s.w. between Transvaal and Orange Free State provinces, then through Griqualand West to join Orange R.; length, 750 m.

Vaasa (*väs'a*), formerly NIKOLAI-STAD, seaport, Finland, on Gulf of Bothnia; shipbuilding; exports timber and tar. Pop. 24,000.

Vács (*voch*), tn., Hungary, on R. Danube, 20 m. n. of Budapest; exports are wine and cattle; Roman antiquities. Pop. 19,000.

Vaigach, isl., Russia, in Arctic Ocean, between mainland and Novaya

Zemlya; mountainous; visited during summer for pelts and fish. Length, 68 m.; breadth, 27 m.

Valais (*vā-lā'*), border canton, s. Switzerland. Surface consists of a deep valley about 80 m. long and 2 m. broad, between Pennine and Bernese Alps; drained by R. Rhone; forests with valuable timber trees on mountain slopes; considerable area covered with excellent pasture; cattle raised; silkworms reared; wine produced; connected with Italy by the Simplon and Great St. Bernard Passes. Chief town, Sion. Area, 2,020 sq. m.; pop. 128,000.

Valdai Hills (*vál'dái*), low, undulating plateau, European Russia, between Leningrad and Moscow; wooded; source of R. Volga. Highest point, 1,150 ft.

Valdepeñas (*val-dá-pén'yas*), town, New Castile, Spain, 30 m. S.E. of Ciudad Real; famous for wine; hot mineral springs in vicinity. Pop. 25,000.

Valdivia (*val-dé'vi-a*), cap. of Valdivia prov., Chile; breweries; its port, Corral, has one of best harbours on w. coast of S. America; wireless station. Pop. 27,000.

Valence (*val-ons*), tn., cap. Drôme, France, on R. Rhone, 58 m. S. of Lyons; manufactures glass, silk, hosiery; cathedral consecrated by Urban II. (1095). Pop. 26,000.

Valencia (*val-en'shē-a*). (1) Prov., Spain, bordering Mediterranean; fertile and well cultivated; chief rivers, Guadalaviar and Júcar; chief products, rice, wheat, maize, mulberry, wine, and oil. Area, 4,150 sq. m.; pop. 926,000. (2) Chief tn. of above, on R. Guadalaviar; archbishop's see, cathedral (12th cent.); univ.; exports olives and olive oil, various fruits; manufactures silks, tiles, linen, leather, cigars. Pop. 251,000. (3) City, N. Venezuela, S. America; important agricultural centre; manufactures cotton and tobacco. Pop. 37,000.

Valenciennes (*vā-lon-sē-en*), tn., Nord, France, 18 m. N.E. of Cambrai; coal-mining centre; manufactures iron, sugar, glass, chemicals; formerly famous for its lace. Pop. 36,000.

Valen'tia, rocky isl., S.W. Kerry, I.F.S.; slate quarries; terminus of Atlantic cables and of cables to Europe; radio station.

Valet'ta, or **VALLETTA**, cap. Malta, on rocky peninsula on N.E. coast; most important Brit. naval and coaling station in Mediterranean; fortified; 16th cent. cathedral; univ., governor's palace (formerly palace of grand masters of Knights of St. John). Pop. 48,000.

Valladolid (*val-ya-dō-léd'*). (1) Prov.,

Spain; traversed by R. Douro; chief industry, agriculture; produces cereals, hemp, flax, and fruit. Area, 2,922 sq. m.; pop. 281,000. (2) Cap. of above, on trib. of R. Douro; univ. (1346); archbishopric; royal palace; unfinished cathedral (1585); manufactures include cloth, pottery, and flour; has agricultural trade. Pop. 77,000.

Vallejo (*val-á'hō*), seaport, California, U.S.A., at mouth of R. Napa; good harbour; outlet to agricultural district; flour milling; U.S. navy yard. Pop. 21,000.

Valleyfield, port, Quebec, Canada, on R. St. Lawrence, 36 m. S.W. of Montreal; seat of Roman Catholic bishopric; cotton, flour, and sawmills. Pop. 9,000.

Valls, city, E. Spain, 11 m. N. of Tarragona; cotton, hemp, woollens, weaving; wine and nuts. Pop. 11,000.

Valo'na, formerly **AVLONA**, seaport, Albania; exports cereals, cotton, olives, live-stock; oil refining. Pop. 10,000.

Valparaíso (*val-pa-ri'sō*), seapt., Chile, on Pacific Ocean; chief commercial and manufacturing centre in Chile; industrial univ.; most important seaport on Pacific coast of S. America; wireless station; has several times been destroyed by earthquake. Pop. 182,000.

Van. (1) Tn., Asia Minor, 260 m. S.E. of Trebizond; built at S. face of high isolated rock, on which is inscription of Xerxes; is encircled by walls. Several mosques and churches; in neighbourhood are orchards and vineyards; local trade in agricultural produce. Pop. 22,000. (2) LAKE, close to above; salt; no visible outlet; extends about 80 m. E. to W., and from 20 to 40 m. N. to S.

Vancouver (*van-koo'ver*). (1) Tn., British Columbia, Canada, on Burrard Inlet; w. terminus of trans-continental rlys.; excellent harbour; lumber, shipbuilding, flour mills, foundries, sugar and oil refineries. Pop. 117,000. (2) City, Washington,

U.S.A., 7 m. N. of Portland; lumbering, fruit growing, dairying; flour mills, canneries. Pop. 13,000.

Vancouver Island, isl., Brit. Columbia, Canada; separated from mainland of Brit. Columbia by Strait of Georgia and Queen Charlotte Sound, and from U.S.A. by Strait of Juan de Fuca; mountainous and forest-clad; coasts bold and rugged; coalfields; fisheries. Cap. Victoria. Area, c. 20,000 sq. m.

Van Diemen's Land. See under TASMANIA.

Vannes (van), tn., cap. Morbihan, France, on R. Vannes, 28 m. E. of Lorient; shipbuilding, oyster fishing; manufactures ropes, leather. Chief tn., Morbihan. Pop. 16,000.

Vaoua Levu. See FIJI.

Var, mar. dep., S.E. France; mountainous, with fertile valleys; coast deeply indented; produces wine, olives, tobacco; manufactures paper, silk, soap. Cap. Draguignan; chief town, Toulon. Area, 2,333 sq. m.; pop. 348,000.

Varazdin, tn., Croatia, Yugoslavia, on R. Drava; coal mining; woollen manufacture; trade in timber, fruit, and tobacco. Pop. 14,000.

Vardar, riv., rises in Serbia, Yugoslavia; flows S.E. past Skoplje and Veles; enters Greece and discharges into the Gulf of Salonica. Length, 200 m.

Varese (va-ré'sá), tn., Lombardy, N. Italy, 30 m. N.W. of Milan; autumn resort; manufactures silk, leather, paper, wine. Pop. 24,000.

Var'na, fortified seapt., Bulgaria, on Black Sea; wine, leather, cloth, butter, grain. Pop. 61,000.

Vasilkov', tn., Ukraine, U.S.S.R., 24 m. S.S.W. of Kiev; breweries, brick works; manufactures tobacco, candles, soap. Pop. 21,000.

Västerås, or VESTERÅS (ves'ter-ås), tn., Sweden, on Lake Mälär; cathedral and castle. Pop. 29,000.

Vasto, fortified tn., Abruzzi, Italy, on Adriatic Sea, 30 m. S.E. of Chieti; silk, wine; extensive cultivation of olives. Pop. 14,000.

Vauluse (vô-kloor'), dep., S.E. France; wine, potatoes, wheat, fruit; manufactures linen, silk, pottery, paper, chemicals. Cap. Avignon. Area, 1,381 sq. m.; pop. 230,000.

Vaud (vô), canton, W. Switzerland, N. and E. of L. Geneva; surface mountainous (Diablerets, 10,600 ft.); extensive plain slopes down to Lakes Geneva and Neuchâtel. Produces white wines; cattle raised; tanning, condensed milk, tobacco, clocks, salt mining. Chief tn., Lausanne. Area, 1,238 sq. m.; pop. 317,000.

Veglia. See KRK.

Vejer de la Frontera (vi'hâr dê lâ fron-tâ-râ), tn., Spain, 30 m. S.E. of Cadiz; oranges. Pop. 15,000.

Vel'ea, formerly KOPRULU or KÖPRÜLÜ, tn., S. Serbia, Yugoslavia, on R. Vardar; silk, maize, and mulberries. Pop. c. 22,000.

Veles-Málaga (vi'leth-mä'lâ-gâ), tn., Málaga, S. Spain; raisins, olive oil, and sugar. Pop. 25,000.

Velika Kikinda. See KIKINDA.

Veliki Beckarek. See BECKEREK VELIKI.

Velletri, tn., Italy, 22 m. S.E. of Rome; cathedral; wine. Pop. 26,000.

Vellore (vel-ör), tn., Madras, India, 80 m. S.W. of Madras; military station; trades in grain. Pop. 50,000.

Vel'sen, tn., Holland, on North Sea; connected with Amsterdam by North Sea Canal. Pop. 36,000.

Vendée (von-dâ'), mar. dep., W. France, woodland in E., fertile plain in S., and marsh in W.; chief products, grain, wine, coal, salt. Cap. La Roche-sur-Yon. Area, 2,690 sq. m.; pop. 395,000.

Vener (vi'ner), largest lake, Sweden, drained by the R. Göta to the Kattegat. Area, 2,150 sq. m.

Venetia (ven-esh'ya), or VENETO, dep. of N.E. Italy; comprises provinces of Verona, Vicenza, Venice, Padua, Belluno, Rovigo, Treviso, Udine. Mountainous in the N.; remainder a fertile plain watered by Rs. Tagliamento, Piave, and Brenta. Chief industries include manufacture

of textiles, glass, tobacco, straw-plait, paper, iron goods, and shipbuilding. Area, 9,818 sq. m.; pop. 4,252,000.

Venetia Julia, dep., N.E. Italy; comprises provinces of Gorizia, Pola, Trieste, Fiume, and Zara; Julian Alps in N., drained by Rs. Isonzo and Timavo; wine, silk, barley, and potatoes. Area, 3,353 sq. m.; pop. 1,004,000.

Venetia Tridentina (*trè-dent-è-na*), department, N. Italy, comprises provinces of Bolzano and Trento; mountainous; marble quarries, lead and zinc; rye, barley, oats. Area, 5,371 sq. m.; pop. 684,000.

Venezuela (*ven-es-uel-la*), republic, S. America; bounded N. by Caribbean Sea, N. by Brit. Guiana, S. by Brazil, W. by Colombia. Country falls into four divisions: low lands round L. Maracaibo, mountain land in N., plains (llanos) of R. Orinoco, and Guiana highlands. Drained by R. Orinoco and tribs. Climate tropical; temperature varies with elevation, warmest along R. Orinoco; rainy season, May to Oct. or Nov. Land is exceedingly rich in natural resources. Forests contain much valuable timber. Llanos provide pasture for large herds of cattle. Soil, extremely fertile, produces maize, cotton, cacao, indigo, rice, rubber, sugar-cane, coffee, tobacco, fruits. Petroleum is found round L. Maracaibo, and Venezuela is second petroleum-producing country in world; other minerals include gold, silver, copper, iron, coal, salt, asphalt, magnesite; pearl fisheries; few industries. Inhabitants include Spaniards, Indians, and half-breeds. Cap. Caracas; chief port, Maracaibo. Area, 393,874 sq. m.; pop. 3,027,000.

Ven'ice, or **VENEZIA**. (1) Prov., N. Italy; fertile plain bordering Adriatic Sea. Area, 943 sq. m.; pop. 519,000. (2) Seaport, N. Italy, cap. of above; situated on 117 islands in the lagoons at head of Adriatic; traversed by c. 170 canals crossed by innumerable bridges. City is divided into two main parts by Grand Canal; con-

nected with mainland by railway viaduct 2 m. long. Lagoons are protected from sea by sandhills and masonry work; shipping enters by several channels; aqueduct carries water supply from mainland. Notable features are magnificent Cathedral of St. Mark (begun 830; destroyed by fire and rebuilt, 976 onwards); opposite is famous Campanile (322 ft. high); Giacomo di Rialto (c. 320), Venice's oldest church; Santi Giovanni e Paolo, with tombs of Doges; Palace of the Doges (founded c. 814; rebuilt after fires, 976, 1105), with magnificent court (1485); Scala dei Giganti, great Council Hall, and Bridge of Sighs connecting palace with prison; museums, with fine examples; Rialto, bridge across Grand Canal; Piazza of St. Mark; Lido (bathing resort) on neighbouring Malamocco I. Famous for glassware and mosaics; gold and silver filigree work, embroidery, lace, damasks, brocades, *objets d'art*, chemicals, leather, cotton and woollen goods, shipbuilding. Until discovery of Cape route to India, Venice was chief European port for trade with East. New port Marghera being built on mainland. Pop. 172,000.

Ven'lo, tn., Limburg, S. Holland, near German frontier; beer, leather, needles, tobacco. Pop. 22,000.

Ventimiglia (*ven-ti-mìl'ya*), seaport, Riviera, Italy, on French frontier; Roman antiquities and Gothic cathedral. Pop. 16,000.

Vent'nor, wat.-pl., S. Isle of Wight, England; Royal National Consumption Hospital. Pop. 5,100.

Vent'spils, formerly WINDAU, seaport and seaside resort, Latvia, on Baltic Sea, 110 m. W.N.W. of Riga; exports timber, butter, hemp, and grain. Pop. c. 17,000.

Vera Cruz (*vé-ra kroos*). (1) State, Mexico, on Gulf of Mexico; interior mountainous and fertile; coast low and sandy; produces chiefly cotton, rum, sugar, maize, wheat, tobacco, coffee; cap. Jalapa. Area, 27,880 sq. m.; pop. 1,160,000. (2) Seaport, in above, on Gulf of Mexico; exports

above products; wireless station. Pop. 53,000.

Vercelli (*ver-chel'è*), tn., Piedmont, Italy, 37 m. s.w. of Milan; cathedral contains 4th cent. ms. of the Gospels, and Vercelli Book, a collection of Old English homilies and poems; Roman antiquities. Pop. 33,000.

Verdun, tn., fortress, Meuse, France, on R. Meuse; hardware, machinery; 12th cent. cathedral; was a centre of resistance to German invasion during Great War. Pop. 29,000.

Vereeniging (*ver-in'ig-ing*), town, Transvaal, S. Africa, 36 m. s. of Johannesburg; coal mining; peace between Boers and British signed here (1902). Pop. 2,500 (whites).

Verkhné-Udinsk (*verch'ne-oo-dinsk'*), chief town, Buriat Mongol Rep., U.S.S.R., on Trans-Siberian Rly., E. of L. Baikal; tea, grain, hides, bristles; important annual fair. Pop. 27,000.

Vermont, New England State, U.S.A., w. of New Hampshire; surface generally undulating and hilly; among highest peaks are Mansfield (4,393 ft.) and Killington (4,241 ft.). Watered by Connecticut R. and tribes, and by Rs. Otter Creek and Missisquoi. Climate healthy, but subject to intense cold in winter. Most important industry is agriculture; hay, oats, maize, wheat, barley, potatoes, and fruit grown. Maple sugar largely produced, and tobacco cultivated. Cattle, horses, sheep, and pigs reared; dairy-farming carried on. Large forests, producing hardwood; and lumbering is important. Woollens and flour are also manufactured. Marble, granite, and limestone are quarried. Chief tns., Montpelier (cap.), Burlington, Rutland, Barre. Area, 9,564 sq. m.; pop. 352,000.

Verni. See ALMA ATA.

Vero'na. (1) Province, N.E. Italy, borders Tirol and L. Gardi. Area, 1,195 sq. m.; pop. 549,000. (2) Cap. of above, on R. Adige; fortress. Roman remains; many mediaeval churches, palaces, and houses; silk, iron goods, furniture, paper. Pop. 151,000.

Versailles (*vir-sā'è*), chief tn. Seine-et-Oise, France, 12 m. s.w. of Paris; magnificent palace erected by Louis XIV.; made National Museum (1833); King of Prussia proclaimed German Emperor here (1871). Treaty of Versailles (1783) ended American War of Independence. Here was held the Peace Conference following the Great War, and Treaty signed 1919. Pop. 69,000.

Versetz. See VRSAČ.

Verviers (*ver-vè-ā'*), tn., Liège, Belgium; manufactures woollen cloth, woollen yarn, and glass. Pop. 42,000.

Vesuvius, active volcano, Italy, 7 m. S.E. of Naples, c. 4,000 ft. high. Eruption (A.D. 79) buried Pompeii in mud and ashes, and Herculaneum by flow of lava; more recent eruptions, 1871-72 and 1906. Wire rope railway carries visitors close to edge of crater; observatory at foot.

Vet'ter, or WETTER, lake, Sweden, drained by R. Motala to the Baltic; noted for frequent and sudden surface disturbances. Length, 80 m.; area, 740 sq. m.

Vevey (*vè-vā'*), tn., Vaud, Switzerland, on Lake Geneva; tourist resort; manufactures chocolate, watches, machinery, tobacco. Pop. 13,000.

Viareggio (*vè-a-red'jō*), seaport and wat.-pl., Italy, 13 m. N.W. of Pisa; exports marble; monument to Shelley, whose body was washed ashore here. Pop. 28,000.

Viat'ka. (1) Province, Russia; surface undulating plateau; low hills on N.E.; forested; many lakes and marshes; watered by Rs. Kama and Viatka; soils mainly unproductive; chief crops, rye, oats, and flax; chief minerals, iron and phosphorite. Area, 43,144 sq. m. Pop. 2,223,000. (2) Chief tn. of above, on R. Viatka, 260 m. N.E. of Nijni-Novgorod; rly. jn.; matches, leather, and agricultural implements. Pop. 57,000.

Viborg (*vî'borg*). (1) Tn., Jutland, Denmark, 35 m. N.W. of Aarhus; 12th cent. cathedral; iron foundries, cloth factories, distilleries. Pop. 15,000. (2) See VIIPURI.

Vicenza (*vî-chent'sa*), tn., Italy, 40 m. w. of Venice; noted for its fine buildings; manufactures silk, woollen, cotton goods, bricks, pottery. Pop. 60,000.

Vichy (*vê-shê*), wat.-pl., Allier, central France, on R. Allier; mineral springs; Vichy water exported. Pop. 17,000.

Vicksburg, tn., Mississippi, U.S.A., on Mississippi R.; trading centre; manufactures furniture, hardware, cotton-seed oil, machinery; exports cotton, lumber. Stronghold of Confederates during Civil War; captured by General Grant (1863). Pop. 18,000.

Victoria. (1) State, S.E. Australia; bounded N. and N.E. by New South Wales, S.E. by Pacific, S. by Indian Ocean, W. by S. Australia. Surface mountainous, with level tract along Murray R. in N.W.; principal mts. are Great Dividing Range, crossing country from E. to W.; drained by R. Murray and tribs., and by rivs. flowing S. from Great Dividing Range. There are many lakes. Climate healthy and temperate. Agriculture important; chief crops, wheat, oats, and barley; potatoes widely grown; grapes and other fruits and tobacco extensively cultivated; horses, cattle, sheep, and pigs reared; dairy farming carried on. Large forests, producing valuable timber. Gold mines important; other minerals, coal, tin, antimony. Manufactures include machinery, hardware, textiles, wine. Chief exports are wool, meat, hides and skins, live animals, flour, and butter. Chief tns., Melbourne (cap.), Geelong, Ballarat, and Bendigo. Area, 87,884 sq. m.; pop. 1,531,000. (2) Cap. of Brit. Columbia, Canada, on Vancouver I.; residential tn.; connected with transcontinental lines by ferries; saw-mills, iron working, cement and chemical factories, fish canneries; fine harbour; large dry dock. Pop. 39,000. (3) Cap. and chief port, Hong-Kong, China; sugar, cotton. Pop. c. 500,000. (4) Seapt., Espirito Santo, Brazil, 290 m. N.E. of Rio de Janeiro; port of call for coasting steamers;

exports coffee, sugar, and rice. Pop. 22,000. (5) Cap. of Seychelles Islands, on Mahé I. (6) LAKE, largest freshwater lake, central Africa; surrounded by Uganda, Kenya, and Tanganyika terr.; entered by the Kagera, Katonga, and other rivers; chief reservoir of R. Nile, to which it drains by Ripon Falls. There are many islands. Frequented by alligators and hippopotami. Discovered by Speke (1858). Area, c. 26,000 sq. m.

Victoria Falls, cataract of the R. Zambezi, Rhodesia, S. Africa; height, c. 400 ft.; width, c. 1 m.; discovered by Livingstone (1855); volume of water greatest in April.

Victorihavn. See NARVIK.

Vidin (*vê-dên*), tn., river port, Bulgaria, on R. Danube; gold and silver filigree; exports cereals; active commerce. Pop. 19,000.

Vien'na, cap. Austria, on R. Danube; one of finest, largest, and most historical cities of Europe, renowned for art, architecture, learning, industry, music. Ringstrasse, on site of old fortifications (destroyed 1858), claims to be handsomest street in the world. Votive Church (1856-79); univ. (founded 1365); Rathaus; celebrated Burg Theater and Opera House; Parliament House; Art Gallery (one of finest in Europe); Maria Theresa, Schiller, and Goethe monuments. Schönbrunn palace and park lie near the city. Vienna is centre of Austrian trade and industry, chief manufactures being iron and steel goods, silk, ornamental leather, *objets d'art*, blouses, hats, clothing, and furniture. Pop. 1,857,000.

Vienne (*vê-en*). (1) Riv., France; rises in dep. Corrèze, joins R. Loire; length, 220 m. (2) Dep., France, generally level; traversed by R. Vienne; produces grain, wine; manufactures cutlery, arms; cap. Poitiers. Area, 2,711 sq. m.; pop. 310,000. (3) Tn., Isère, France, on R. Rhone; has Romanesque-Gothic cathedral and Roman remains; manufactures textiles, hardware, gloves; large trade in wine. Pop. 22,000.

Viersen (*fēr'sen*), tn., Rhineland, Prussia, 11 m. s.w. of Crefeld; velvets, silks, damask. Pop. 32,000.

Vierzon (*vê-er-son*), tn., Cher, central France, on R. Cher, trib. of R. Loire; manufactures agricultural machinery, glass, porcelain. Pop. 11,000.

Vigevano (*vê-jâ-vâ'nô*), tn., Lombardy, Italy, on R. Ticino, 18 m. s.w. of Milan; cathedral; silk. Pop. 30,000.

Vigo (*vê'gô*), seaport and naval station, Pontevedra, n.w. Spain, on Ria de Vigo; fisheries; flour, sugar, petroleum, leather; wireless station. Pop. 53,000.

Vikari (*vê'pôr-ê*), formerly VIBORG, seaport, Finland, at mouth of Saima Canal, near Gulf of Finland; exports cement and farm produce. Pop. 48,000.

Villach (*vil'ach*), tn., Carinthia, s. Austria, on R. Drava; lead-mining centre; manufactures wooden articles and metallic colours. Pop. 22,000.

Villafranca di Verona (*vêl-a-frang'-ka dê ver-ô'na*), tn., Venetia, Italy, 10 m. s.w. of Verona; silk industry. Pop. 12,000.

Villalba (*vêl-yâl'ba*), town, Lugo, n.w. Spain; cloth and pottery; livestock and grain trade. Pop. 15,000.

Villanueva de la Serena (*vêl-yu-nue-va dê la sê-râ'na*), tn., Badajoz, Spain, on R. Guadiana; grain, hemp, melons, and wine. Pop. 15,000.

Villanueva y Geltru (*ê hel-trô'*), seaport, Barcelona, Spain, on Mediterranean Sea; textiles, paper, iron goods. Pop. 14,000.

Villarreal (*vêl'ya-râ'al*), tn., Castellon, E. Spain, 4 m. from Mediterranean Sea; oranges; manufactures paper and woollen goods. Pop. 17,000.

Villarrica (*vêl'la-rê'ka*) tn., Paraguay, 80 m. s.e. of Asuncion; in rich agricultural region; tobacco, yerba maté; oranges. Pop. c. 25,000.

Villavieja (*vêl'ya-vi-chô's'a*), seaport, Oviedo, s. Spain; fisheries and coasting trade. Pop. 21,000.

Villefranche-sur-Saône (*vêl'-fronsh'*), tn., Rhône, France, on R. Saône; cot-

tons, steel cables, agricultural machinery, motor-cars, wines. Pop. 16,000.

Villena (*vêl-yâ'na*), tn., s. Spain, 28 m. n.w. of Alicante; soap, brandy, silk, salt. Pop. 16,000.

Villeneuve-sur-Lot (*vêl-nœuv-sûr-lô'*), tn., Lot-et-Garonne, s.w. France, on R. Lot; boots and shoes, tin boxes; trade in agricultural produce and wine. Pop. 7,000.

Vilna. See WILNO.

Vincennes. (1) (*van-sen'*) Suburb of Paris, Seine, France; manufactures chemicals and cartridges; castle. Pop. 42,000. (2) (*vin-sen'*) City, Indiana, U.S.A., on Wabash R., between Indiana and Illinois; manufactures steel, buttons, flour, glass; railway centre. Pop. 17,000.

Vindhya (*vin'd'yâ*), mt. range, India, forming N. boundary of the Deccan; length, c. 700 m.; alt. 1,500 to 4,500 ft.

Virgin'ia, S. Atlantic State, U.S.A. Surface greatly diversified, sloping being from w. to e.; in e. is low-lying coastal region known as Tidewater; in centre is Piedmont plateau; farther w. Blue Ridge extends across state from s.w. to n.e. (highest point, Roger Mt., 5,720 ft.). Between Blue Ridge and Alleghany Mts. farther w. lies Great Valley of Virginia, famed for scenery. Watered by Rs. Potomac (with trib. Shenandoah), Rappahannock, York, James. Temperate and healthy, except in the marshy districts in e. Flora includes oak, pine, cedar, and other timber trees. Agriculture is an important industry, principal crops being maize, wheat, oats, and potatoes. Tobacco is extensively cultivated, and cotton grown in considerable quantities. Horses, cattle, sheep, and pigs reared. Excellent fisheries, esp. oysters. Coal is most important mineral. Important industries are flour milling, lumbering, manufacture of textiles, tobacco, leather, hardware. Chief tns., Richmond (cap.), Norfolk, Roanoke, and Portsmouth. Area, 42,627 sq. m.; pop. 2,309,000.

Virgin Islands, group, W. Indies,

E. of Porto Rico, belonging partly to Britain and partly to U.S.A.; mountainous. Anegada, Virgin Gorda, Tortola, and a number of smaller islands belong to Great Britain. Chief products, sugar, cotton, tobacco. St. Thomas, St. John, and St. Croix belong to U.S.A.; chief product, bay rum. Total area, 190 sq. m.; total pop. 31,000 (Brit. 58 sq. m.; pop. 5,000).

Vis (Italian *Lissa*), island, Yugoslavia, in Adriatic Sea, off coast of Dalmatia; wine and sardines. Chief tn., Vis. Pop. 5,000.

Visby, or **WISBY**, cap., isl. Gotland, Sweden; seaport and wat.-pl.; important commercial city in anc. times; has cathedral, ruined churches, towers, walls. Pop. 10,000.

Vistula, riv., Poland; rises in Carpathian Mts., flows N. through Poland and Danzig, divides into several branches, two of which empty into Frisches Haff; main stream, turning W., enters Baltic near Danzig; length, 650 m.; navigable to Cracow.

Vitebsk', town, White Russia, U.S.S.R., on S. Dvina R.; cathedral; manufactures include boots and shoes, glass, and agricultural machinery. Pop. 91,000.

Viterbo, tn., Italy, 40 m. N.W. of Rome; surrounded by ancient Lombard fortifications; Etruscan cemeteries in neighbourhood. Pop. 25,000.

Viti Levu. See under FIJI.

Vitoria, or **VITTORIA**, tn., N. Spain, 40 m. S.E. of Bilbao; trade in hardware, wine, mules, and horses; 12th cent. cathedral; here Wellington defeated the French. Pop. 35,000.

Vittoria, tn., Sicily, 45 m. W. by S. of Syracuse; trade in wine and soda. Pop. 32,000.

Vittorio, tn., Italy, 40 m. N. of Venice; mineral springs; silk mills; seat of bishopric. Pop. 24,000.

Vivero (re-*vá-ró*), seaport, Spain, 43 m. N. of Lugo, on Bay of Biscay. Pop. 13,100.

Vizagapatam', seaport, E. coast, Madras, India, 178 m. N.E. of Masulipatam; manufactures native cloth; ivory, horn, sandalwood carving;

exports grain, manganese ore, and sugar. Pop. 45,000.

Viscaya. See BISCAY.

Vizianagram', tn., Madras, India, 30 m. N.E. of Vizagapatam; trade centre; military cantonment and residence of maharajah. Pop. 40,000.

Vlaar'dingen, fishing port, S. Holland, Holland, 6 m. W. of Rotterdam; one of headquarters of Dutch cod and herring fisheries. Pop. 27,000.

Vladikavkaz' ('key of the Caucasus'), tn., N. Caucasian Area, Russia, on R. Terek; of great strategic importance. Pop. 74,000.

Vladimir (*vlad-yě-měr*). (1) Prov., Russia, between Nijni-Novgorod and Moscow; surface undulating, and mostly unfertile; lakes and marshes drained by R. Oka and its trib., the Klyazma; chief minerals, alabaster and iron ore; manufactures linens, cottons; fruit culture; extensive domestic industries. Area, 12,041 sq. m.; pop. 1,320,000. (2) Cap. of above, on R. Klyazma; two anc. cathedrals; manufactures cotton, tobacco; gardening, fruit growing. Pop. 35,000.

Vladivostok (*vlá-dě-ostok'*), seaport and naval station, Far Eastern Area, U.S.S.R., on Gulf of Peter the Great (Sea of Japan); has naval and mechanical works; state dockyards; most important naval and commercial centre of Russian Pacific coast; terminus of Trans-Siberian Rly. Pop. 102,000.

Vlissingen. See FLUSHING.

Vltava (*vl'ta-va*) (German *Moldau*), riv., Czechoslovakia; rises in Bohemian Forest; tributary of R. Elbe. Length, 270 m.

Voděna, tn., Greece, 40 m. E.S.E. of Monastir; see of Greek archbishop; anc. capital of Macedonia; rice, tobacco, cotton, leather. Pop. c. 25,000.

Voghera (*vō-gā'ra*), tn., Lombardy, Italy, 16 m. S.W. of Pavia; manufactures silk. Pop. 21,000.

Voiron (*vu-ron'*), tn., Isère, S.E. France, 14 m. N.W. of Grenoble; cloth, silk, and paper. Pop. 9,000.

Voivodina, prov., N.E. Yugoslavia, N. of Danube and Drave rivs.; drained by R. Tisa; agriculture. Chief tn., Gombor. Area, 7,607 sq. m.; pop. 1,380,000.

Vol'ga, riv., Russia, longest in Europe (c. 2,400 m.); rises in Valdai Hills; flows E. to Kazan, then turns S., S.W., and S.E. to enter Caspian Sea by innumerable mouths near Astrakhan; chief tribs., Unzha, Sura, Oka, Sheksna, Kama. Navigation begins near source; one of chief commercial rivers of world; connected by canals with Baltic, Black, and White Seas, also with rivers Dnieper, Dniester, Don, etc. Sturgeon, pike, and other fisheries; ice-bound in winter.

Vol'o, sept., E. Greece, at head of Gulf of Volo, 33 m. S.E. of Larissa; archiepiscopal see. Pop. 41,000.

Volog'da. (1) Prov., Russia, separated on E. from Siberia by Ural Mts.; surface flat; forest-covered; drained by Rs. N. Dvina and Pechora; cereals cultivated; chief mineral products, salt and iron ore. Area, 44,145 sq. m.; pop. 1,053,000. (2) Cap. of above, on R. Vologda; rly. jn.; manufactures agricultural implements, beer, and leather goods; trade in flax, linseed. Pop. 57,000.

Volak, tn., Russia, on R. Volga, 65 m. N.E. of Saratov; ironworks, tanneries, and flour mills. Pop. 36,000.

Volta, riv., W. Africa, between Rs. Comoe and Niger; flows generally S.E. and S. through Gold Coast to Gulf of Guinea, near Adda. Length, 900 m.

Volter'ra, tn., Italy, 32 m. S.E. of Pisa; manufactures alabaster goods; museum with Etruscan collection. Pop. 17,000.

Vol'tri, tn., Italy, on Gulf of Genoa, 9 m. N.W. of Genoa; paper, cotton, and woollen goods, iron; shipbuilding. Pop. 16,000.

Voral'berg, mountainous prov., Austria, bordering Lake of Constance; cattle and goats raised; manufactures textiles. Cap. Bregenz. Area, 1,005 sq. m.; pop. 140,000.

Voronezh (vor-on-yesh'). (1) Prov., S. Russia; hilly; drained by R. Don;

fertile, producing grain, sugar-beets; horses and cattle reared; leather and flour manufactured. Area, 26,147 sq. m.; pop. 3,300,000. (2) Cap. of above, on R. Voronezh; centre for agricultural trade; flour-mills, brick-making, and breweries. Pop. 98,000.

Vosges (vôsh). (1) Mts., E. France, lying to W. of R. Rhine; highest point, Ballon de Guebville, c. 4,670 ft.; drained to N. by Rs. Moselle and Saar; W. slopes thickly wooded, E. slopes vine-clad; excellent pasturage; noted for cattle. (2) Dep., E. France; traversed in E. by Vosges Mts. and in W. by spurs of the Langres plateau; forests; numerous mineral springs; coal, stone quarries; textile industries. Cap. Épinal. Area, 2,303 sq. m.; pop. 382,000.

Vo'tiak, Autonomous Area, Russia; between province of Viatka on W. and Ural Area on E.; includes part of foothills of Ural Mts.; largely forested; agriculture chief occupation; rye, oats, flax, and potatoes; minerals include iron, slate, and copper. Chief tn., Izhevsk. Area, 12,142 sq. m.; pop. 756,000.

Votkinsk, tn., Ural Area, Russia, 110 m. S. of Perm; manufactures agricultural machinery. Pop. 19,000.

Voznesensk, tn., riv. port, Ukraine, U.S.S.R., 80 m. N.N.E. of Odessa, on R. Bug; cathedral; distilleries, breweries. Pop. 21,000.

Vrat'sna, tn., Bulgaria, 38 m. N.N.E. of Sofia; seat of archbishop; tanneries, wine, gold and silver filigree. Pop. 15,000.

Vrede (vrê'da), tn., N. Orange Free State, S. Africa, 34 m. S. of Standerton; centre of one of best stock-breeding districts in prov. Pop. (white) 2,000.

Vrieland. See FRIESLAND.

Vrsae (ver-shats'), tn., Voivodina, Yugoslavia, 40 m. N.E. of Belgrade; wine and brandy; flour milling and distilling. Pop. 27,000.

Vryburg, cap., Brit. Bechuanaland, Cape Prov., S. Africa, on Cape-to-Cairo Rly., 126 m. N. of Kimberley; alt. 3,890 ft.; stock rearing. Pop. 2,500.

Vryheid (*vri'hēi*), tn., Natal, S. Africa, 80 m. N.E. of Ladysmith; in rich mineral dist. (coal, iron, copper, gold, silver, lead). Pop. 4,000.

Vyatka. See VIATKA.

Vyas'ma, tn., w. Russia, 90 m. E.N.E. of Smolensk; cathedral (1596), citadel; leather goods, tobacco. Pop. 17,000.

Vyernyi, or **VERNI**. See ALMA ATA.

Vyrnwy (*virn'wi*), riv., Wales, rises in N.W. Montgomeryshire, and joins R. Severn on Shropshire border; upper valley has been converted into a lake by a dam, and forms head reservoir for Liverpool water supply.

Vyshniy-Volochok (*vish'nē-vō-lō-chok*), tn., Russia, 68 m. N.W. of Tver; saw-milling, textiles, glass, and beer. Pop. c. 20,000.

W

Waco (*wā'ko*), city, Texas, U.S.A., 95 m. N.E. of Austin; manufactures of flour, woollens, saddlery, harness; centre of cotton-growing dist. Pop. 53,000.

Wadai (*wā'dāi*), dist., Chad Colony, French Equatorial Africa; w. of Lake Chad; surface generally desert; several oases and dense forests; produces rice, wheat; cattle, camels, sheep, and horses raised; cattle, horses, and coffee exported. Cap. Abeshir. Area, c. 170,000 sq. m.; pop. c. 1,000,000.

Wadebridge, port, Cornwall, England, on R. Camel, 7 m. N.W. of Bodmin; exports granite, china clay, agricultural produce. Pop. 2,500.

Wadhurst, par. and vil., Sussex, England, 7 m. S.E. of Tunbridge Wells; sandstone quarries. Pop. (par.) 3,850.

Wadhwan, tn., Bombay, India, on Kathiawar Peninsula; manufactures soap and saddlery; centre of cotton and grain trade. Pop. 16,000.

Wādī Hal'fa, tn., Anglo-Egyptian Sudan, Africa, on R. Nile, below second cataract; rly. connection with Khartoum. Pop. 3,000.

Wād Med'ani, tn., Anglo-Egyptian Sudan, Africa, on R. Blue Nile; depot for grain; oil and soap works. Pop. 19,000.

Wagga-Wagga (*wag'ga*), tn., New South Wales, Australia, on R. Murrumbidgee; pastoral and gold-mining region; wine, tobacco. Pop. 8,800.

Waikato (*wi-kā'to*), riv., North I.,

New Zealand; rises on Mt. Ruapehu, traverses Lake Taupo, flows N.W. into Pacific; navigable for 75 m.; length, 175 m.

Wainfleet, mkt. tn., Lincolnshire, England, 14 m. N.E. of Boston, on R. Steeping; grammar school; formerly a seaport of importance; harbour silted up. Pop. 1,400.

Wakefield. (1) Co. bor., W. Riding, Yorks, England, on R. Calder, 9 m. S. of Leeds; manufactures agricultural machinery and boilers, worsted yarn, flour, soap, chemicals, coco matting; trade in grain; coal mining in neighbourhood; cathedral; grammar school. Pop. 59,100. (2) Tn., Massachusetts, U.S.A., 10 m. N. of Boston; manufactures of rattan, boots and shoes, stoves. Pop. 13,000.

Walachia (*wal-āk'-e-a*), part of Rumania between Transylvanian Mts. and R. Danube; cereals and fruits. Area, 20,267 sq. m.; pop. 3,486,000.

Walcheren (*wal'ker-en*), isl., Zealand, Holland, between mouths of R. E. and w. Schelde, protected against sea by dunes and dykes; agriculture; scene of disastrous expedition under Chatham (1809). Chief tns., Flushing and Middelburg (cap.). Area, 81 sq. m.

Waldeck (*wal'dek*), former prov., Germany, between Westphalia and Hesse-Nassau; now part of Hesse-Nassau, Prussia; hilly; drained by R. Eder and Diemel, tribs. of R. Weser; poor soil; oats, rye, potatoes. Cap. Arolsen. Area, 433 sq. m.; pop. 72,000.

Waldenburg (*val'den-boorg*), town, Silesia, Prussia, 40 m. s.w. of Breslau; centre of a coal-mining district; manufactures porcelain, stone ware, fire bricks; textiles in neighbourhood. Pop. 44,000.

Wales (*wæls*), principality of Great Britain; bounded n. by Irish Sea, w. by St. George's Channel, s. by Bristol Channel, e. by Monmouthshire, Herefordshire, Shropshire, and Cheshire. In s.w., Anglesey forms an island cut off from mainland by Menai Strait. Coast-line broken in n. by opening of R. Dee and mouths of Rs. Clwyd and Conway, on w. by Carnarvon and Cardigan Bays, on s.w. by St. Bride's Bay and Milford Haven, and on s. by Carmarthen and Swansea Bays. Drainage in n. is by upper waters of Rs. Severn and Dee, and by Clwyd, Conway, and other streams; in w. by Rs. Dovey, Telfi; and in s. by upper waters of Wye and Usk, and by Taff, Tawe, and Towy. Anglesey is low and undulating, and there is a stretch of low ground in s.w. peninsula; but elsewhere the country is uniformly hilly, rising to many peaks of from 2,000 to over 3,000 ft., and reaching extreme height of 3,560 ft. in Snowdon, the highest peak in Great Britain outside of Scotland. Climate resembles that of England, except that rainfall is greater. Chief crops, hay, oats, barley, turnips, potatoes; horses, cattle, and sheep reared. Great wealth lies in minerals and connected industries, especially in coal; S. Wales coalfield is one of most important in Britain; smaller coalfield in n. Large production of slate in n.; extensive smelting of iron, copper, and tin in s.; flannel manufactured at Newtown and Montgomery. Largest tns. are Cardiff, Swansea, Rhondda, and Merthyr-Tydfil. Area, 7,466 sq. m.; pop. 2,158,000.

Walfish Bay. See WALVIS BAY.

Walk'ernburn, vil., Peeblesshire, Scotland, on R. Tweed; manufactures woollen goods. Pop. 1,200.

Walk'erville, city, Ontario, Canada, on Detroit R.; suburb of Windsor. Pop. 11,000.

Wallachia. See WALACHIA.

Wallaroo', port, S. Australia; copper-mining centre. Pop. 3,000.

Wallasey, co. bor., Cheshire, England; suburb of Birkenhead; residential dist. Pop. 97,500.

Wall's Wall's, tn., s.e. Washington, U.S.A., on Oregon boundary; centre of wheat and fruit region; poultry rearing; agricultural machinery; flour, leather. Pop. 16,000.

Wall'ingford. (1) Mkt. tn., Berks, England, on R. Thames; has ruined Norman castle; trade in agricultural produce. Pop. 2,800. (2) Tn., Connecticut, U.S.A., 11 m. n.e. of New Haven; manufactures silver and plated goods, rubber goods, firearms. Pop. 10,000.

Wall'ington, vil., Surrey, England, in urb. dist. of BEDDINGTON AND WALLINGTON.

Walls'end, tn., Northumberland, England, on R. Tyne, at e. end of Hadrian's Wall; collieries; ship-building, engineering, lead and copper smelting; bricks, tiles, cement. Pop. 44,600.

Wal'mer, wat.-pl., Kent, England, adjoining Deal; castle is official residence of Warden of Cinque Ports. Pop. 5,300.

Wal'sall, co. bor., s. Staffs, England, in Black Country; manufactures iron and brass ware, saddlery, gloves, motor fittings; in neighbourhood of coal, lime, and iron mines. Pop. 103,100.

Wal'sham, NORTH, urb. dist. and mkt. tn., Norfolk, England, 16 m. n. of Norwich; agricultural implements; old market cross. Pop. 4,000.

Wal'soken, urb. dist., Norfolk, England, suburb of Wisbech; agricultural produce. Pop. 4,100.

Wal'tham, city, Massachusetts, U.S.A., on Charles R., 10 m. w. of Boston; watchmaking, textiles, motors, bicycles. Pop. 39,000.

Wal'tham Abbey, or WALTHAM HOLY CROSS, tn., Essex, England, on R. Lea, 12 m. n. of London; brewing and market gardening; manufactures of explosives. Pop. 7,100.

Wal'thamstow, industrial suburb of London, in Essex, England, 7 m. N.E. of St. Paul's, near Epping Forest; breweries. Pop. 133,000.

Wal'ton-le-Dale, urb. dist., Lancs, England, on R. Ribble, 2 m. S.E. of Preston; cotton mills; market gardening. Pop. 12,700.

Wal'ton-on-Thames, mkt. tn., Surrey, England; angling and tourist resort. Pop. 18,000.

Wal'ton-on-the-Hill, par., Lancs, England; suburban dist. of Liverpool. Pop. 83,000.

Wal'ton-on-the-Naze, wat.-pl., Essex, England; iron foundries and brick works. Pop. 3,100.

Wal'vis Bay, formerly WALFISH, Brit. bay and port, S.W. Africa, on Atlantic Ocean; only good harbour between Angola and R. Orange; fishing and whaling; exports chilled meat. Pop. 1,900.

Wandsbeck (*wand's bek*), tn., Holstein, Prussia; suburb of Hamburg; beer, leather, tobacco. Pop. 40,000.

Wands'worth, suburb of London, England, on R. Thames, 5½ m. S.W. of St. Paul's; oil mills, dyeworks, paper works, calico printing, brewing. Pop. 353,100.

Wanganui (*wan-ga-noo'i*), port, S.W. coast, North I., New Zealand, on R. Wanganui; exports wool, grain, meat, dairy produce; freezing works. Pop. 28,000.

Wanlockhead', vil., N. Dumfriesshire, Scotland, on Wanlock Water; lead mining. Pop. 600.

Wan'stead, urb. dist. and par., Essex, England, N.W. suburb of London. Pop. 19,200.

Wan'tage, urb. dist., mkt. tn., and par., Berks, England, 9 m. S.W. of Abingdon; ironworks; trade in agricultural produce; birthplace of Alfred the Great. Pop. 3,400.

Wap'ing, dist., E. London, England, on N. bank of R. Thames; contains London Dock. Pop. 3,200.

Warasdin. See VARAZDIN.

Ward'le, urb. dist., S.E. Lancs, England, adjoining Rochdale; cotton and woollen manufactures. Pop. 4,800.

Ware (*war*), urb. dist., Herts, England, on R. Lea, 2 m. N.E. of Hertford; trade in malt; brickfields. Pop. 6,200.

Ware'ham, munic. bor. and mkt. tn., Dorsetshire, England, near Poole Harbour; old earth wall nearly surrounds the town; lime, clay, cement; cordite factory near by. Pop. 2,100.

War'minster, urb. dist. and mkt. tn., Wilts, England, 20 m. N.W. of Salisbury; silk, and agricultural implements. Pop. 5,200.

Warnsdorf (*warn's dorf*), frontier tn., N.E. Bohemia, Czechoslovakia; silk and cotton. Pop. 20,000.

War'qia, tn., Algerian Sahara, Africa, 350 m. S. of Algiers; on oasis; surrounded by a wall; dates. Pop. 3,000.

War'ren. (1) City, Ohio, U.S.A., on R. Mahoning, 50 m. S.E. of Cleveland; manufactures iron and steel, electrical apparatus; coal and iron mining. Pop. 41,000. (2) Tn., Pennsylvania, U.S.A., on R. Alleghany, 70 m. S.E. of Buffalo; natural gas and oil region; oil refineries; engines, boilers, pianos. Pop. 14,000.

War'renpoint, port, co. Down, N. Ireland, on Carlingford Lough; wat.-pl. Pop. 2,200.

War'rington, co. bor., Lancs, England, on R. Mersey; manufactures leather, cotton, ironware, glass, chemicals; rly. jn. Pop. 79,300.

Warrnambool', port, Victoria, Australia, on Warrnambool Bay; marketing centre for agricultural and dairy products. Pop. 8,000.

War'saw. (1) Co., Poland; surface low and flat; drained by R. Vistula; stretches of forest; rye, oats, barley, potatoes are cultivated. Area, 11,316 sq. m.; pop. 2,115,000. (2) Cap., Poland, on R. Vistula; railway centre; iron and steel works; manufactures boots and shoes, hosiery, wooden wares, sugar, tobacco; agricultural market; wool and hop fairs; cathedral, univ. Pop. 1,000,000.

War'sop, tn., Notts, England, 5 m. N.E. of Mansfield; limestone quarries and gravel pits. Pop. 10,700.

Warta (*war'ta*), or WARTHE, riv., Poland and Prussia; rises in Carpathian Mts. and flows generally n.w. with many windings to join R. Oder at Küstrin; length, 445 m.

Warwick (*wor'ik*). (1) Co. tn., Warwickshire, England, on R. Avon; manufactures agricultural implements, gelatine, and bricks; famous castle. Pop. 13,500. (2) Tn., Rhode I., U.S.A., on Narragansett Bay; manufactures cotton, silk, and woollen goods. Pop. 18,000.

Warwickshire, w. midland co. of England; surrounded by cos. of Leicester, Northants, Oxford, Glos, Worcester, and Staffs. Surface flat or slightly rolling, with low hills in s.; drained by Rs. Avon, Tame, and Leam; has canal communication with Rs. Severn, Mersey, Trent, Thames; in n. was Forest of Arden. Fireclay, limestone, ironstone; orchards; agriculture; cattle and sheep raised; important industrial dist. in n., with coalfield and manufactures of heavy iron goods, hardware, firearms, jewellery, ribbons, watches, bicycles, motor-cars. Cap. Warwick; largest tns., Birmingham and Coventry. Area, 946 sq. m.; pop. 1,534,800.

Wash. THE, arm of North Sea, between Norfolk and Lincoln, England; numerous sandbanks; very shallow. Length, 22 m.; breadth, 15 m.

Washington. (1) Pacific State, U.S.A., bounded n. by Canada, e. by Idaho, s. by Oregon, w. by Pacific Ocean. Surface crossed from n. to s. by Cascade Mts., to e. of which is high plateau, while in w. country is mountainous and heavily wooded, with fertile prairies and valleys; watered by R. Columbia and tribs. The climate temperate in w., extreme in e. Chief crops: wheat, barley, oats; horses, cattle, and sheep raised; dairy farming; fruit largely grown; lumbering important. Excellent salmon, oyster, and other fisheries. Minerals include coal, gold, copper, lead, granite, marble. Meat packing, flour milling, and fish canning important. Chief tns., Olympia (cap.), Seattle, Spokane,

Tacoma. Area, 69,127 sq. m.; pop. 1,357,000. (2) Cap. of U.S.A., in District of Columbia, with which it is co-extensive, on R. Potomac, on w. border of Maryland; many splendid public buildings. Almost in the centre stands the Capitol, where Congress meets, and the Supreme Court sits. Other important buildings are White House, official residence of president of the U.S.A.; Library of Congress, and National Observatory, George Washington Univ., Howard Univ. for Negroes, Catholic Univ. White marble obelisk to memory of George Washington. Fine parks and botanic gardens. Engraving and plate printing. Pop. 487,000. (3) City, Pennsylvania, U.S.A., 23 m. s.w. of Pittsburgh; coal and oil region; manufactures iron, tinplate, glass, carriages, flour. Pop. 21,500. (4) Urb. dist., Durham, England, 5 m. w. of Sunderland; coal mining; chemical manufactures. Pop. 17,000.

Watch'et, port, Somerset, England, on Bristol Channel; ironfounding and paper making. Pop. 1,900.

Waterbury, city, Connecticut, U.S.A., on R. Naugatuck, 18 m. n.w. of New Haven; manufactures brass, watches, rolling mill and foundry products, photographic materials, electrical supplies, chemicals. Pop. 101,000.

Waterford. (1) Maritime co., Munster, I.F.S. bounded by Cork, Tipperary, Kilkenny; surface mountainous except in e., which is flat and in parts marshy; chief rivs., Blackwater and Suir; cattle breeding and dairying; large amounts of bacon and butter exported; minerals include copper and marble; valuable coast and river fisheries. Area, 710 sq. m.; pop. 79,000. (2) Co. tn. of above, on R. Suir; two cathedrals; exports agricultural produce; breweries, fisheries. Pop. 26,600.

Waterloo'. (1) Vil., Brabant, Belgium, 11 m. s. of Brussels; Wellington defeated Napoleon here in 1815. (2) City, Iowa, U.S.A., on R. Cedar; agricultural region; canning and packing industries; tractors, motor-

cars, gas engines, agricultural and dairying machinery. Pop. 46,000. (3) Tn., Ontario, Canada, 35 m. N.W. of Hamilton; fruit growing. Pop. 7,500.

Waterloo'-with-Seaforth, wat.-pl., Lancs, England, 4 m. N.W. of Liverpool; residential. Pop. 31,200.

Wat'erside, vil., Ayrshire, Scotland, on R. Doon; ironworks. Pop. 1,400.

Wat'ertown. (1) City, New York, U.S.A., 65 m. N.E. of Syracuse, on Black R.; carriage and wagon works; manufactures steam engines, paper, silk, clothing, farm implements, air brakes, thermometers. Pop. 32,000.

(2) Tn., Massachusetts, U.S.A., on R. Charles, 6 m. W. of Boston; govt. arsenal; rubber and woollen goods, paper, motor-cars. Pop. 21,000. (3) Tn., S. Dakota, U.S.A., on R. Big Sioux; machinery; flour mills; meat-packing. Pop. 10,000.

Wat'erville, city, Maine, U.S.A., on R. Kennebec, 20 m. N.E. of Augusta; manufactures cottons, woollens, and has railway workshops. Pop. 13,000.

Waterliet (*-lîd*), city, New York, U.S.A., on R. Hudson, 5 m. N.E. of Albany; U.S. arsenal; bells, ironware, woollens, asbestos products. Pop. 16,000.

Wat'ford, tn., s. Herts, England, on R. Colne; brewing and malting industries, and corn mills. Pop. 56,800.

Wath-upon-Dearne (*dârn*), urb. dist., Yorks, England, 8 m. S.E. of Barnsley; coal mines, ironworks, quarries; oil, soap, and bottle works. Pop. 13,700.

Wat'ling Island, isl., Bahamas, W. Indies; supposed landing-place of Columbus (1492). Pop. 700.

Wattrelos (*vatr-lô*), tn., Nord, France, near Belgian frontier; textiles, incense boxes, chicory, and sabots. Pop. 33,000.

Wauke'san, city, Illinois, U.S.A., on Lake Michigan; mineral springs; manufactures iron goods, brass wire, leather, sugar. Pop. 19,000.

Wau'san, city, Wisconsin, U.S.A., on R. Wisconsin, 140 m. N. of Madison; silver fox farms; centre of dairying industry. Pop. 19,000.

Wavre (*wâvr*), tn., Brabant, Belgium, 16 m. S.E. of Brussels; tanning, brewing; manufactures lace and paper. Pop. 8,600.

Way'cross, city, Georgia, U.S.A., 95 m. S.W. of Savannah; railway shops; manufactures lumber, naval stores, machinery; vegetable and fruit canneries. Pop. 18,000.

Wazirabad (*wa-zîr-a-bâd*), tn., Punjab, India, near r. bk. of R. Chenab; manufactures steel and iron; trade in timber, grain, sugar. Pop. 19,000.

Waziristan (*wa-zîr-ê-stân*), dist., N.W. Frontier Province, India, in Sulaiman Mts.; mountainous, with numerous streams; some parts well wooded, but most of country barren. Area, c. 5,000 sq. m.; pop. uncertain.

Waz'ran, sacred tn., Morocco, Africa, 60 m. N.W. of Fez; coarse woollen cloth produced. Pop. 13,000.

Weald (*wêld*), THE, dist. between N. and S. Downs, England; forms part of Sussex, Surrey, and Kent; was formerly covered by Forest of Anderida; still wooded in places. Till 19th cent. noted for iron industry based on local ores.

Weald'stone, urb. dist., Middlesex, England, 1½ m. N. of Harrow; part of Greater London. Pop. 27,000.

Wear (*wêr*), riv., Durham, England, rises in Pennine Chain and flows into North Sea at Sunderland; length, 60 m.

Web'ster, town, Massachusetts, U.S.A., 16 m. S.W. of Worcester; manufactures cottons, woollens, and shoes. Pop. 13,000.

Wed'more, par. and vil., Somerset, England, 8 m. W. of Wells; makes Cheddar cheese. Treaty signed here (878) between Alfred the Great and the Danes. Pop. (par.) 2,400.

Wednesbury (*wens'-ber-i*), tn., Staffs, England, 7 m. N.W. of Birmingham; iron and coal mining centre; manufactures iron and steel ware, and pottery. Pop. 31,500.

Wednesfield (*wens'-fîld*), urb. dist., Staffs, England; suburb of Wolverhampton; locks and keys; coal mining. Pop. 9,300.

Wee'don Beck, parish and vil., Northants, England, 8 m. w. of Northampton; has military barracks, powder magazines, and stores. Pop. 2,000.

Wei-hai-Wei (*wai-hi-wai*), terr., N.E. coast of Shantung peninsula, China, extends 10 m. along Bay of Wei-hai-Wei, and includes several islands in bay; leased by Britain in 1898; restored to China in 1930; contains city of Wei-hai-Wei; has naval and coaling station; cereals, vegetables, and fruit are grown; exports ground-nuts, oil, fish, eggs, sugar; excellent climate makes it a summer resort. Area, 285 sq. m.; pop. 154,000.

Weimar (*vi'mar*), cap. Thuringia, Germany, on R. Ilm; contains 15th cent. church, Liszt Museum, and Goethe-Schiller monument; book trade; manufactures cloth and leather. Pop. 46,000.

Weinheim (*vin'him*), tn., Baden, Germany, 10 m. N.E. of Mannheim; manufactures leather, soap, machinery, wine. Pop. 16,000.

Weissenfels (*vi'sen-fels*), tn., Saxony, Prussia, on R. Saale, 20 m. s. of Halle; manufactures machinery, iron-ware, boots, paper. Pop. 37,000.

Welland, city, Ontario, Canada, on Welland Canal, 40 m. S.E. of Hamilton. Pop. 10,000.

Welland Canal, artificial waterway between lakes Erie and Ontario, Canada; cut (1824-29) to avoid Niagara Falls; reconstructed (1913-30); difference of level of lakes (326 ft.) overcome by 7 locks; length (Port Colborne to Port Weller), 25 m.; depth, 25-30 ft.; bottom width, 200 ft.; available for largest lake steamers.

Well'esley Province, British colony, Straits Settlements, w. coast of Malay Peninsula, opposite Penang I., to which it belongs administratively; rice, pepper, spices, tapioca, sugar, tobacco. Area, 270 sq. m.; pop. 116,000.

Well'ingborough, urban dist. and mkt. tn., Northants, England, 10 m. N.E. of Northampton; boots and

shoes; iron smelting and brewing. Pop. 21,200.

Well'ington. (1) Cap. of New Zealand, in North I., on Cook Strait; seapt. with excellent harbour; seat of Victoria Univ. College; foundries, freezing works, soap and candle works, boot factories; important trade. Pop. 134,000. (2) Urb. dist. and mkt. tn., Shropshire, England, 10 m. E. of Shrewsbury; manufactures agricultural implements, wood ware, nails, brass and iron articles. Pop. 8,200. (3) Urb. dist. and mkt. tn., Somersetshire, England, 6 m. S.W. of Taunton; from it the Duke of Wellington took his title; druggets, serges, brick and tile works. Pop. 7,100. (4) College near Sandhurst (public school).

Wells. (1) Munic. bor. and mkt. tn., Somersetshire, England, at base of Mendip Hills; fine cathedral; theological coll. Bath and Wells form one bishopric. Named from holy springs where King Ina built a monastery (704). Pop. 4,800. (2) Port, N. Norfolk, England; brewing, rope making; machinery; oyster fisheries. Pop. 2,500.

Welsh'pool, munic. bor. and mkt. tn., Montgomeryshire, Wales, on R. Severn, 7 m. N. of Montgomery; trade in flannel, tweeds, woollen shawls, agricultural produce. Pop. 5,600.

Welwyn Garden City (*wel'in*), tn., Herts, England, 6 m. W. of Hertford; founded 1920 as first of Satellite Towns of London (21 m. distant). Pop. 8,600.

Wem, urb. dist. and mkt. tn., Shropshire, England, 10 m. N. of Shrewsbury; flour milling, tanning. Pop. 2,200.

Wem'bley, urb. dist., Middlesex, England, 10 m. from St. Paul's Cathedral; was site of British Empire Exhibition (1924-25). Pop. 48,500.

Wemyss (*wi'ms*), par., Fife, Scotland, on Firth of Forth; includes villages of Buckhaven, Methil, Innerleven, W. and E. Wemyss; coal mining. Pop. 25,000.

Wenchow, treaty port, Chekiang, China, on Wenchow Bay; formerly

centre of Japanese trade with China; exports tea, timber. Pop. 90,000.

Wend'over, mkt. tn., Bucks, England, at foot of Chiltern Hills, 5 m. s.e. of Aylesbury. Halton, about 1½ m. distant, is a headquarters station of Royal Air Force. Pop. 2,400.

Wend'ton, vil. and par., Cornwall, England, 8 m. w. by s. of Falmouth; tin mines. Pop. (par.) 3,400.

Wener, LAKE. See **VENER**.

Wen'lock, munic. bor., Shropshire, England, on R. Severn; coal mines and ironworks. Pop. 14,200.

Werdau (*ver'dou*), tn., Saxony, Germany, 30 m. s. of Leipzig; cotton and wool spinning; machinery, paper, chemicals. Pop. 21,000.

Werden (*ver'den*), tn., Rhine Prov., Prussia, on R. Ruhr, 6 m. s. of Essen; woollen goods, paper, leather; coal mines. Pop. 13,000.

Wermelskirchen (*ver'mels-kîrch-en*), tn., Rhine Prov., Prussia, 20 m. e.s.e. of Disseldorf; textile industries; manufactures metallic wares and cigars. Pop. 16,000.

Wernigerode (*ver'ne-ga-ro'da*), tn., Saxony, Prussia, at n. foot of Harz Mts., 43 m. s.w. of Magdeburg; manufactures machinery, brandy, and cigars. Pop. 20,000.

Wesel (*wî'zel*), tn., Rhineland, Prussia, at junction of Rs. Lippe and Rhine; metal goods, cement, pottery, soap; annual fair. Pop. 24,000.

Weser (*wî'zer*), riv., Germany; rises as Rs. Werra and Fulda, which join at Minden; flows n. to Bremen and enters North Sea; navigable for 270 m. to Minden. Length, 440 m.

Wesermünde (*wî-zer-mûn'da*), formerly **LEHE**, tn., Hanover, Prussia, at mouth of R. Weser; adjoins Bremerhaven; market gardening, brick making, and brewing. Pop. 72,000.

West Africa, general name for African coast territories belonging to various European countries, comprising: *British*: Nigeria, Gambia, Gold Coast, Sierra Leone. *French*: Senegal, French Guinea, Ivory Coast, Dahomey, French Sudan, Upper Volta, Mauritania, Niger, Dakar. *Portu-*

guese: Cape Verde Island, Portuguese Guinea, Angola. *Spanish*: Fernando Po, Rio de Oro, Spanish Guinea. Mandated regions of Togoland and Cameroons divided between Britain and France. See separate articles.

West Allis, tn., Wisconsin, U.S.A., 6 m. w. of Milwaukee; manufactures engines, steam pumps, tanks, machine tools, and steel castings. Pop. 35,000.

West Bridg'tord, urb. dist., Notts, England, 2 m. s.s.e. of Nottingham; here Grantham Canal joins R. Trent. Pop. 17,800.

West Bromwich (*brom'ich*), munic. and co. bor., Staffs, England, 6 m. n.w. of Birmingham; hardware manufacture; forges, iron and brass foundries; coal mines. Pop. 81,300.

West'bury, urb. dist., Wilts, England, 4 m. s. by e. of Trowbridge; ironworks; woollens; important rly. jn. Pop. 4,000.

West Calder. See **CALDER**.

West Ches'ter, residential centre, Pennsylvania, U.S.A., 23 m. w. of Philadelphia; market gardening, dairy farming; agricultural implements. Pop. 12,000.

West'erham, par. and mkt. tn., Kent, England, 21½ m. s.e. of London, on N. Downs; birthplace of General Wolfe. Pop. (par.) 3,165.

West'ern Australia, most w. state, Australia; coast deeply indented in n.w.; surface generally tableland, with mountain ranges on w. coast, reaching 4,024 ft. in Mt. Bruce; drained by Rs. Ord, Fitzroy, De Grey, Fortescue, Ashburton, Gascoyne, Murchison, Greenough, Swan, and other streams; climate dry, and very hot in n., Mediterranean in s.w.; large stretches of desert, but about three-fourths of surface suitable for grazing. Agriculture carried on in fertile parts, the chief crops being wheat, oats, and barley; fruit cultivated; horses, cattle, sheep, and pigs reared; minerals include gold (chief source of wealth), coal, lead, silver, copper, tin. Large forests, with much valuable timber, karri and jarrah in s.w. being two of most valuable hard woods

known. Chief exports, wheat, flour, wool, gold, timber, hides, pearls, and fresh fruit. Cap. Perth. Area, 975,920 sq. m.; pop. 333,000.

Western Isles. See **HBRIDES**.

Westfield, town, Massachusetts, U.S.A., 8 m. w. of Springfield; machinery, bicycles, radiators, and paste-board boxes. Pop. 19,000.

Westgate-on-Sea, wat.-pl., Kent, England, 2 m. s.w. of Margate. Pop. 5,000.

West Ham, munic. bor., Essex, England, on R. Thames, part of Greater London; manufactures iron, rubber; shipbuilding yards, sugar refineries, soap and jute works; contains Victoria Docks and part of Royal Albert Docks. Pop. 294,100.

West Hartlepool. See **HARTLEPOOL**.

West Hoboken, tn., New Jersey, U.S.A., adjoining Hoboken; manufactures artificial flowers, silk, and embroidered goods; flowers extensively grown. Pop. 40,000.

Westhoughton, urb. dist., Lancs, England, 5 m. n.w. of Wigan; silk and cotton factories; collieries. Pop. 16,000.

West Indies, islands to n. and e. of the Caribbean Sea; extend from Yucatan and Florida to Gulf of Paria, and along n. coast of Venezuela; comprise the Bahamas; the four large islands of Cuba, Jamaica, Haiti, and Porto Rico, known as the Greater Antilles; Leeward and Windward Islands, known as Lesser Antilles; and Trinidad, off Venezuelan coast. Of these, Cuba and Haiti are independent; Bahamas, Barbados, Jamaica, most of Leeward and Windward Islands, and Trinidad belong to Great Britain; Porto Rico and part of Virgin group to U.S.A.; Martinique and Guadeloupe to France, and Curaçao and dependencies to Holland. Many of islands mountainous in character; others of coral formation. Climate generally tropical and soil fertile. Islands produce sugar, bananas and other fruits, cotton, coffee, cocoa, ginger, sponges, arrowroot, tobacco; and asphalt from Trinidad.

Area, 91,819 sq. m.; pop. 10,529,000. See separate articles.

West Kilbride, tn., Ayrshire, Scotland, 4 m. w. of Ardrossan; summer resort; hydropathic. Pop. 3,600.

West Kirby, tn., Cheshire, England, included in urban dist. of Hoylake and W. Kirby; residential dist. and wat.-pl. Pop. 6,000.

West Lothian, formerly LINLITHGOWSHIRE, maritime co., S.E. Scotland; surface undulating; slopes from s. to Firth of Forth in n.; watered by Rs. Avon and Almond; chief industry, agriculture; cereals, dairy farming; coal, iron, oil shale, and fireclay are worked; paraffin oil and other shale products manufactured, also paper. Co. tn., Linlithgow. Area, 120 sq. m.; pop. 81,400.

Westmeath, inland co., Leinster, I.F.S.; bounded by Cavan, Meath, Offaly, Roscommon, Longford; surface varied with hill, valley, and lake, interspersed with bog; drained chiefly by R. Shannon; Lough Ree is largest lake; occupations mainly agricultural, oats being chief crop; cattle rearing; limestone quarries. Co. tn., Mullingar. Area, 680 sq. m.; pop. 57,000.

Westminster, metropolitan bor., London; extending from banks of R. Thames to Hyde Park; includes within its bounds Hyde Park, St. James's Park, and Green Park, and contains Houses of Parliament, Westminster Hall, Westminster Abbey, Westminster Cathedral (R.C.), Cenotaph, Buckingham Palace, and St. James's Palace. In former times Westminster was separated from City of London by Temple Bar. Abbey is one of finest examples of Early English architecture; it is burial-place of eighteen sovereigns of England, and of the Unknown Warrior. Pop. 129,500.

Westmorland, co., n. England; bounded n. and n.w. by Cumberland, w. and s. by Lancs, e. by Yorks and Durham. Surface generally hilly, with moorlands and deep valleys; highest points, Helvellyn and Bow Fell; drained by Rs. Eden, Kent,

Lune, Leven. Contains famous Lake Dist., with Ullswater and Windermere on the Cumberland and Lancs borders respectively, and Grasmere, Rydal Water, and others entirely within county. Lead, slate, graphite, granite produced. Chief crop is oats; largest part is pasture; sheep and cattle are reared. Co. tn., Appleby. Area, 789 sq. m.; pop. 65,400.

West New York, tn., New Jersey, U.S.A., on R. Hudson; connected by ferry with New York; large grain elevators; manufactures silk and rubber goods, pianos, cotton-seed oil. Pop. 37,000.

Weston-super-Mare, wat.-pl., Somerset, England, on Bristol Channel; Worlebury Camp, anc. British stronghold, is on hill above town. Pop. 28,600.

West Palm Beach, tn., Florida, U.S.A., on w. shore of Lake Worth, opposite Palm Beach; popular holiday resort. Pop. 27,000.

Westphalia (west-fäl'e-a), prov., Prussia, bordering on Holland; surface largely hilly; Weser Mts. and Teutoburger Forest in E., Sauerland Mts. and Westerwald in S., whence they slope into N. German plain; drained by Rs. Ems, Weser, Lippe, Ruhr, and other streams; large area forested; flax and hemp, potatoes, and cereals grown. Large deposits of coal and iron; one of greatest industrial states of Prussia; iron and steel and textile manufactures. Cap. Münster. Largest tns., Dortmund, Gelsenkirchen, and Bochum. Area, 7,803 sq. m.; pop. 4,811,000.

West Point, military post, New York, U.S.A., on Hudson R., 45 m. N. of New York; U.S. military academy; includes Constitution I., directly opposite.

Westport, urb. dist., port, and wat.-pl., co. Mayo, I.F.S., on Westport Bay; trade in agricultural produce and provisions. Pop. 3,500.

West'slade, urb. dist., Northumberland, England, 6 m. N. of Newcastle; coal mining. Pop. 7,700.

West Tar'ring, eccles. dist., Sussex,

England, 1 m. N.W. of Worthing; remains of former palace of archbishops of Canterbury. Pop. 3,300.

West Virginia, S. Atlantic State of U.S.A., bounded N. by Pennsylvania and Maryland, E. and S. by Virginia, W. by Kentucky and Ohio. Surface mountainous, esp. in E., where it is crossed by ranges of Alleghany Mts., reaching 4,860 ft. in Spruce Knob; drained by R. Ohio and tribs. Climate healthy and temperate. Agriculture specially important; chief crops, wheat, maize, oats, potatoes, tobacco; fruit cultivated; live-stock raised. Large area forested. Coal mining important; other minerals, petroleum, natural gas. Leading industries include steel, glass, leather, and pottery manufacture, lumbering; riy. workshops. Chief tns., Wheeling, Huntington, Charleston (cap.). Area, 24,170 sq. m.; pop. 1,724,000.

Westward Ho, wat.-pl., Devonshire, England, on Bideford Bay; named from Charles Kingsley's novel; good bathing; golfing centre.

Weth'eral, par. and vil., Cumberland, England, on R. Eden; ruins of Benedictine abbey. Pop. (par.) 3,400.

Weth'erby, mkt. tn., W. Riding, Yorks, England, on R. Wharfe, 12 m. N.E. of Leeds. Pop. 2,100.

Wetter, LAKE. See VETTER.

Wetzlar (wets'lar), tn., Rhineland, Prussia, 33 m. N.W. of Frankfurt-on-Main; cathedral; manufactures iron, gloves, optical instruments, chemicals. Pop. 13,000.

Wex'ford. (1) Maritime co., Leinster, I.F.S., bounded by Wicklow, Carlow, Kilkenny, Waterford; surface generally level; highest point, Mt. Leinster (2,610 ft.), in N.W.; watered by Rs. Slaney, Barrow, and other streams; excellent grazing and large export of agricultural produce, pigs, cattle, butter, poultry, eggs; valuable fisheries on coast. Area, 908 sq. m.; pop. 95,800. (2) Co. tn. of above, at mouth of R. Slaney; seapt.; shipbuilding; fisheries; trade in agricultural produce. Pop. 12,000.

Wey'bridge, urb. dist., Surrey,

England, at junction of Rs. Wey and Thames; Brooklands racing track here. Pop. 7,400.

Weymouth. (1) Or WEYMOUTH AND MELCOMBE REGIS, wat.-pl., Dorsetshire, England, on Weymouth Bay; boatbuilding; stone quarries; packet station for the Channel Islands. Pop. 22,000. (2) Tn., Massachusetts, U.S.A., 11 m. s.e. of Boston; manufactures boots and shoes. Pop. 15,000.

Whe'ley Bridge, vil., Cheshire, England, 10½ m. s.e. of Stockport; collieries in vicinity. Pop. 6,000.

Wheel'ing, tn., W. Virginia, U.S.A., 60 m. s.w. of Pittsburgh; iron, steel, tin, glass, pottery, tobacco. Pop. 62,000.

Whick'ham, tn., Durham, England, 3½ m. s.w. of Gateshead; centre of coal-mining area; iron, steel, wine, and chemical works; roperies. Pop. 20,800.

Whip'ingham, par. and vil., N. Isle of Wight, England; church of St. Mildred contains memorials to Queen Victoria and members of the royal family. Pop. 2,000.

Whip'snade, hamlet, Beds, 3 m. s. of Dunstable. Famous zoological gardens.

Whit'burn. (1) Par. and vil., Durham, England, 3 m. n. of Sunderland; sea-bathing; coal and lime mines. Pop. (par.) 5,300. (2) Tn., West Lothian, Scotland, on R. Almond, 2½ m. s.w. of Bathgate; coal and iron. Pop. 2,400.

Whit'by. (1) Tn., N. Riding, Yorks, England, at mouth of R. Esk. Fashionable resort; ruins of Whitby Abbey. Caedmon died in monastery (680). Manufactures jet ornaments; fishing and boat-building. Pop. 11,400. (2) See ELLESMERE PORT AND WHITBY.

Whit'church. (1) Mkt. tn., Shropshire, England, 18 m. n. of Shrewsbury; malting and large cheese fairs. Pop. 6,000. (2) Par. and tn., Hants, England, on R. Test, 7 m. n.e. of Andover; has large trade in agricultural produce. Pop. (par.) 2,500.

(3) Par. and vil., Glamorgan, Wales, on R. Taff, 1 m. n.w. of Llandaff; has large iron and tin works. Pop. (par.) 11,000.

White'chapel, 'East end' dist., London, included in metropolitan bor. of Stepney. Pop. 54,000.

White'field, urb. dist., Lancs, England, 6 m. n.w. of Manchester; cotton manufactures. Pop. 9,100.

Whiteha'ven, port and mkt. tn., Cumberland, England; collieries; deposits of hematite iron ore; engineering works, shipbuilding yards, and breweries. Pop. 21,100.

White Plains, tn., New York, U.S.A., on R. Bronx, 22 m. n.e. of New York; residential town. Pop. 36,000.

White Russia, republic, U.S.S.R., n. of Ukraine and e. of Poland; level surface; swamps in s.; largely forested; drained by Rs. S. Dvina, Dnieper, and tribs.; flax, potatoes; live-stock. Cap. Minsk. Area, 48,940 sq. m.; pop. 4,984,000.

Whit'horn, royal burgh, Wigtonshire, Scotland, on Solway Firth; landing-place of St. Ninian, the first apostle of Scotland (4th cent.); ruins of cathedral. Pop. 1,000.

Whit'ing, tn., Indiana, U.S.A., on L. Michigan; oil refining. Pop. 10,000.

Whit'ley Bay, holiday resort, Northumberland, England, in urb. dist. of Whitley and Monkseaton, on coast, 2½ m. n.e. of N. Shields; lighthouse on St. Mary's I. Pop. (urb. dist.) 24,200.

Whit'stable, urb. dist. and wat.-pl., Kent, England, 6 m. n.w. of Canterbury; oyster-beds. Pop. 11,200.

Whit'tington, urb. dist., Derby, England, 10 m. s. of Sheffield; earthenware, bricks; coal mining and iron working. Pop. 8,000.

Whit'tlesey, or WHITTLESEA, urb. dist. and mkt. tn., Cambridgeshire, England, 5 m. e. of Peterborough; brick-making important. To n. is artificial cut forming new R. Nen. Pop. 8,300.

Whitwick (*whit'ik*), par. and tn., Leicestershire, England, included in

Coalville; coal mining; hosiery. Pop. 4,500.

Whit'wood, urb. dist., W. Riding, Yorks, England, $4\frac{1}{2}$ m. n.w. of Pontefract; coal mining. Pop. 6,200.

Whit'worth, urb. dist., Lancs, England, 3 m. n. of Rochdale; has cotton mills, coal mines, and slate quarries. Pop. 8,400.

Wich'ita, city, Kansas, U.S.A., on R. Arkansas; railway workshops, meat-packing establishments, flour mills; aeroplanes; centre for live-stock and grain. Pop. 111,000.

Wich'ita Falls, tn., N. Texas, U.S.A., on R. Wichita; great gas and oil fields in surrounding country; oil refineries. Pop. 44,000.

Wick, royal burgh and port, on North Sea, E. Caithness, Scotland; herring-fishing centre; manufactures fish guano, nets, boats. Pop. 7,500.

Wick'low. (1) Maritime co., Leinster, I.F.S.; lies along E. coast, between Dublin and Wexford; Wicklow Mts. cover practically whole surface (Lugnaquilla, 3,039 ft.); several lakes; watered by Rs. Liffey, Slaney, and other streams; agriculture limited; good sheep pasture; lead, copper, sulphur, granite occur; manufactures cordite; oyster-beds at Arklow in S.E. Area, 782 sq. m.; pop. 61,000. (2) Co. tn. of above, at mouth of R. Vartry; chemical works; good harbour; exports ores and grain. Pop. 3,300.

Wid'nes, tn., Lancs, England, on R. Mersey; manufactures soap and alkali; iron foundries; copper smelting, paint and locomotive works. Pop. 40,600.

Wieliczka (*wyā-litch'ka*), tn., Poland, Europe, 6 m. S.E. of Cracow; remarkable salt mines. Pop. 6,000.

Wiener-Neustadt (*vē-ner-nōi'stat*), tn., Lower Austria, Austria, 26 m. S. of Vienna; manufactures locomotives, machinery, earthenware, leather, paper. Pop. 37,000.

Wiesbaden (*wēs-bā-den*), wat.-pl., S. Hesse-Nassau, Prussia; hot saline springs; surgical instruments, artificial manures, and chocolate. Pop. 152,000.

Wig'an, co. bor., Lancs, England, on R. Douglas, 18 m. N.W. of Manchester; collieries; cotton manufactures; forges; oil and chemical works. Pop. 85,400.

Wight (*wit*), Isle of, England, in English Channel, off coast of Hants, separated from mainland by Spithead and Solent; surface generally undulating; off extreme W. are high chalk pinnacles known as 'The Needles'; drained by R. Medina. Fine climate, favourite winter and summer resort and great yachting centre. Produces wheat; sheep raised; cement. Chief tns. are Newport, Ryde, Cowes. Area, 147 sq. m.; pop. 88,400.

Wig'ston Mag'na, urb. dist., Leicestershire, England, 5 m. S. of Leicester; railway workshops. Pop. 11,400.

Wig'ton, urb. dist. and mkt. tn., Cumberland, England, 12 m. S.W. of Carlisle; tanneries; jam making. Pop. 3,500.

Wig'town, co. tn., royal burgh, and port, Wigtownshire, Scotland, on Wigtown Bay. Pop. 1,300.

Wig'townshire, maritime co., S.W. Scotland; lies along Irish Sea and North Channel; coast broken by Loch Ryan and Luce Bay; surface generally low-lying and comparatively level, with low hills in N.; divided into the Rhinns, the peninsula formed by Loch Ryan and Luce Bay, the Machers, between Luce Bay and Wigtown Bay, and the Moors; drained by Rs. Luce, Bladenoch, Cree, and other streams; many lakes. Agriculture carried on; chief crops, oats and turnips; cattle and sheep raised; dairy farming is important, numerous creameries; no mineral wealth, and manufactures unimportant. Exports wool, cheese, live-stock. Chief tns., Wigtown, Stranraer. Area, 487 sq. m.; pop. 29,300.

Wilhelmshaven (*vīl'helmz-hā-fen*), port, wat.-pl., Hanover, Prussia, on North Sea, in an enclave surrounded by Oldenburg; formerly station for German North Sea fleet; large dockyard; fine harbours; exports agricultural produce. Pop. 25,000.

Wilkes-Barre (*wilks'bar-i*), city, Pennsylvania, U.S.A., on N. branch of R. Susquehanna, 15 m. S.W. of Scranton; anthracite coal region; manufactures machinery, locomotives, iron, steel, and copper articles, silk and cotton goods. Pop. 87,000.

Wilkinsburg, residential tn., Pennsylvania, U.S.A., 5 m. E. of Pittsburgh; planing mills and ice-plant. Pop. 30,000.

Willenhall, urb. dist., Staffs, England, 3 m. E. of Wolverhampton; coal mining; iron and brass founding; bolts and locks. Pop. 21,100.

Willerden, suburb of London, Middlesex, England, 7 m. N.W. of St. Paul's; large railway works. Pop. 184,400.

Williamsport, city, summer resort, Pennsylvania, U.S.A., on W. branch of R. Susquehanna; extensive lumber industry; manufactures fire and gas engines, sewing machines, rubber, silk. Pop. 46,000.

Williamstown, port, Victoria, Australia, at mouth of R. Yarra Yarra; suburb of Melbourne; shipbuilding, rly. workshops, and meat-freezing works.

Willman's, town, Connecticut, U.S.A., 30 m. E. of Hartford; manufactures thread, silk, woollens. Pop. 12,000.

Willington, urb. dist., Durham, England, 5 m. N. of Bishop Auckland; large collieries, whinstone quarries. Pop. 9,000.

Wilmington. (1) Port, Delaware, U.S.A., on R. Delaware; manufactures leather, gunpowder, machinery, iron and steel goods; shipbuilding. Pop. 107,000. (2) Port, N. Carolina, U.S.A.; largest commercial city in the state; exports cotton, lumber, naval stores. Pop. 32,000.

Wilm'slow, urb. dist., Cheshire, England, on R. Bollin; cotton manufactures; residential outskirts of Manchester. Pop. 9,800.

Wilno (*vil'no*), formerly VILNA. (1) Co., N.E. Poland, Europe; mainly plain, rising in S. to low uplands; many marshes and lakes, with much

forest; drained by Rs. Dvina and Wilija; chief occupations are agriculture (rye and oats), and forestry. Chief tn., Wilno. Area, 10,814 sq. m.; pop. 1,006,000. (2) Cap. of above, on R. Wilija; cathedral, univ.; important rly. centre; manufactures buttons, gloves; exports timber and grain. Lithuania claims Wilno as its cap. Pop. 129,000.

Wilsden, par. and vil., Yorks, England, 5 m. N.W. of Bradford; manufactures worsted and worsted goods. Pop. (par.) 2,400.

Wilton, munic. bor. and mkt. tn., Wilts, England, on R. Wiley, 2½ m. N.W. of Salisbury; manufactures carpets. Pop. 2,200.

Wiltshire, or WILTS, inland co., England; bounded N. by Gloucester, E. by Berks and Hants, S. by Dorset, W. by Somerset and Gloucester. Surface undulating; crossed by various ranges of hills, including the Marlborough Downs (highest point, Inkpen Beacon, 1,010 ft.). Drained by headwaters of R. Thames, and by Rs. Salisbury Avon, Bristol Avon, Kennet, and other streams; several canals. Agriculture carried on; chief crops, wheat and barley; cattle, sheep, and pigs reared; bacon curing and dairy farming are important. Manufactures include woollens, silks, carpets, railway material. Contains Stonehenge, and Salisbury Plain was acquired by government for military purposes. Co. tn., Salisbury. Area, 1,350 sq. m.; pop. 303,300.

Wimbledon, munic. bor., Surrey, England, part of Greater London; Common was meeting-place of Rifle Association (1860-89); headquarters of English lawn tennis. Pop. 59,500.

Wimborne-Minster, or WIMBORNE, urb. dist. and mkt. tn., Dorsetshire, England, at junction of Rs. Allen and Stour, 6 m. N. of Poole; noted minister and library with chained books; coach-building works. Pop. 3,900.

Winchburgh, par. and vil., W. Lothian, Scotland, 12 m. W. of Edinburgh; oil works; brick and tile making. Pop. (par.) 2,000.

Winch'comb, tn., Gloucestershire, England, on R. Isborne, $6\frac{1}{2}$ m. S.E. of Cheltenham; flour, silk, and paper mills; tanneries. Pop. 2,700.

Winch'elsea, par. and anc. tn., Sussex, England, 8 m. S.E. of Hastings; former Cinque Port. Old Winchelsea, an important seaport in Saxon times, was submerged in 13th cent. Pop. 150.

Win'chester, city, Hants, England, on R. Itchen; place of great antiquity; residence of Saxon kings, and for long cap. of country. Cathedral is longest in England, and has magnificent interior. Remains of old royal castle and Wolvesey Castle. Winchester College, famous public school, was founded (1387) by William of Wykeham. Pop. 23,000.

Windau. See **VENTSPILS**.

Win'dermere. (1) Lake, Westmorland and Lancs, England; shores much indented and generally low; wooded islets in centre; drained by R. Leven; largest lake in England; stretches $10\frac{1}{2}$ m. N. and S., greatest breadth 1,610 yds. (2) Tn., Westmorland, England, on Lake Windermere, 7 m. N.W. of Kendal; picturesque scenery. Pop. 5,700.

Windhoek (*wind'hook*), cap. of S.W. Africa, 253 m. inland from Walvis Bay; alt. 5,600 ft.; hot springs; fruit culture; silver, copper, lead, and salt are found in vicinity. Pop. 8,000 (including 3,500 whites).

Windsor (*wind'sor*). (1) Tn., Berks, England, on R. Thames. Contains Windsor Castle, a royal residence, with St. George's Chapel, containing many royal tombs. In park is mausoleum of Frogmore. Windsor is connected with Eton by a bridge across river. Pop. 20,300. (2) Port, Ontario, Canada, on R. Detroit; connected with Detroit by tunnel and train ferries; agricultural and fruit-growing region; salt industries; flour milling, and canneries. Pop. 61,000.

Wind'ward Islands, part of the Lesser Antilles, Brit. W. Indies; include Grenada, St. Vincent, St. Lucia, and the Grenadines; cotton, sugar,

cocoa, spices, lime juice, fruits produced. Total area, 516 sq. m.; pop. 175,000. See separate articles.

Win'gate, par. and vil., Durham, England, 9 m. S.E. of Durham; coal mining and iron working. Pop. (par.) 11,425.

Win'nipeg ('murky water'). (1) Cap., Manitoba, Canada, at confluence of R. Assiniboine and Red R.; seat of provincial parliament; has two cathedrals, univ. In 1871 it had a pop. of 241, and was one of the trading posts of the Hudson's Bay Co., known as Fort Garry; now a centre of rail and river trade; chief grain market in world; fur auctions; great grain elevators and flour mills; machinery, confectionery, meat products; workshops of Canadian Pacific Ry. Pop. 202,000. (2) LAKE, Manitoba, Canada; drained by R. Nelson into Hudson Bay. Area, 8,555 sq. m. (3) Riv., Manitoba, Canada; issues from Lake of the Woods, and flows W. to Lake Winnipeg.

Winnipeg'o'sis, lake in Manitoba and Saskatchewan, Canada; drains into L. Winnipeg. Area, 2,000 sq. m.

Wino'na, city, Minnesota, U.S.A., on R. Mississippi, 100 m. S.E. of St. Paul; medicines, furs, shoes, food products; large grain and lumber trade. Pop. 19,000.

Wins'combe, par. and vil., Somerset, England, $16\frac{1}{2}$ m. S.W. of Bristol; finely situated in Mendip Hills. Pop. (par.) 2,000.

Wins'ford, urb. dist., Cheshire, England, 15 m. E. of Chester; important salt-producing dist. Pop. 11,000.

Wins'low, mkt. tn., Bucks, England, 6 m. S.E. of Buckingham; agricultural centre. Pop. 1,500.

Win'ston-Sa'lem, two continuous towns in N. Carolina, U.S.A., 60 m. W. of Raleigh; manufactures tobacco and cotton. Pop. 75,000.

Winterthur (*wint'er-toor*), tn., Zurich, Switzerland, 17 m. N.E. of Zurich; great railway centre; important locomotive and machinery works; cotton goods, wine. Pop. 54,000.

Win'throp, town, Massachusetts,

U.S.A., on peninsula in Massachusetts Bay, 4 m. N.E. of Boston; summer resort. Pop. 15,500.

Wirksworth, urb. dist., mkt. tn., Derbyshire, England, 12 m. N. by W. of Derby; lead mines, stone quarries; manufactures cotton, silk, hosiery, and tape. Pop. 3,900.

Wisbech (*wis'bēch*), munic. bor., mkt. tn., and river port, Cambridgeshire, England, 21 m. N.N.E. of Peterborough, on R. Nen; manufactures agricultural implements, beer, oilcake; fruit extensively grown. Pop. 12,000.

Wisby. See **VISBY**.

Wisconsin, N. Central State, U.S.A.; bounded N. by Lake Superior, Michigan, E. by Lake Michigan, S. by Illinois, W. by Iowa and Minnesota. Surface an undulating plain with elevation of from 600 to 1,000 ft.; in S. are prairie lands; drained mainly by R. Mississippi on W. boundary, and its tribs. St. Croix, Chippewa, Black, and Wisconsin. Numerous lakes, largest Lake Winnebago, in E. Climate temperate, although winters are long and cold. Agriculture important; large crops of wheat, maize, oats, and barley, also potatoes, rye, sugar-beet, and tobacco are cultivated; dairying very important; cattle, sheep, horses, mules, and pigs raised in large numbers. Dense forests, with pine, oak, and other valuable timber trees. Chief mineral, iron. Principal manufactures are flour, butter and dairy produce, hardware, lumber products, agricultural tools, furniture, leather, paper, textiles; meat packing is carried on. Cap. Madison. Area, 56,066 sq. m.; Pop. 2,953,000.

Wisconsin Rapids, formerly **GRAND RAPIDS**, tn., Wisconsin, U.S.A., on Wisconsin R., 100 m. N. of Madison; manufactures wooden goods. Pop. 6,500.

Wishaw, tn., Lanarkshire, Scotland; amalgamated with Motherwell; rly. wagon works, blast furnaces, iron-works, engineering works, and coal mines. Pop. 19,000.

Wismar (*wis'mar*), port, Mecklenburg-Schwerin, Germany, on Baltic

Sea; excellent harbour; shipbuilding; manufactures sailcloth, tobacco, paper; was an important Hanse town. Pop. 26,000.

Witham (*wil'am*). (1) Mkt. tn., Essex, England, 8 m. E.N.E. of Chelmsford; trade in agricultural produce; fine old church. Pop. 4,400. (2) Riv., England, rises in Rutland, flows generally N. to Lincoln, then S.E. to Wash. Length, 80 m.

With'ernsea, seaside resort, Yorks, England, 15 m. E. of Hull; fishing; sea rapidly encroaching on land. Pop. 4,300.

With'ngton, tn., Lancs, England, 4 m. S. of Manchester, of which it is a residential suburb. Pop. 15,000.

With'nell, urb. dist., Lancs, England, 4 m. S.W. of Blackburn; cotton mills, bleach works. Pop. 3,000.

Wit'ney, mkt. tn., Oxfordshire, England, on R. Windrush, 11 m. W. by N. of Oxford; blankets, gloves, and woollen goods. Pop. 3,400.

Witten (*vit'ten*), tn., Westphalia, Prussia, 8 m. S.W. of Dortmund; iron and steel foundries, railway machine shops, glass works. Pop. 73,000.

Wittenberg (*vit'ten-ber-g*), tn., Saxony, Prussia, on R. Elbe, 55 m. S.W. of Berlin; manufactures machinery, cloth, leather; famous for its connection with Luther (1517); univ. united with that of Halle (1815). Pop. 23,000.

Wittenberge (*vit'ten-ber-ga*), town, Brandenburg, Prussia, 75 m. N.W. of Berlin; railway machine shops; manufactures textiles. Pop. 26,000.

Witu (*wē'too*), or **WITU**, sultanate in Tanaland prov. of Kenya Colony, at mouth of R. Tana; rubber is chief product. Cap. Witu. Area, 1,200 sq. m.; pop. 15,000.

Wit'watersrand ('white waters ridge'), popularly known as **THE RAND**, a rich gold-mining dist. in S. Transvaal, S. Africa. Chief tn., Johannesburg.

Wiveliscombe (*wil'scum*), mkt. tn., Somersetshire, England, 10 m. W. by N. of Taunton; agricultural centre; slate quarries. Pop. 1,300.

Wiv'enhoe, tn., Essex, England, on R. Colne; ship and yacht building; oysters. Pop. 2,200.

Wloclawek (*wlots-lá'vch*), tn., Warsaw prov., Poland, on R. Vistula; river port; breweries, ironworks, pottery, and chicory factories. Pop. 40,000.

Woburn (*woo'burn*). (1) Mkt. tn., Beds, England, 11 m. n.w. of Luton; Woburn Abbey, seat of Duke of Bedford, occupies site of Cistercian abbey. Pop. 1,200. (2) City, Massachusetts, U.S.A., 10 m. n.w. of Boston; boots, shoes, chemicals, glue. Pop. 17,000.

Wo'king, tn., Surrey, England, on R. Wey, 6 m. n. of Guildford; health resort; barracks. Pop. 29,900.

Wo'kingham, mkt. tn., Berks, England, 7 m. e.s.e. of Reading. Pop. 7,300.

Wolfenbüttel (*wolf'en-boo-tel*), town, Brunswick, Germany, on R. Oker, 45 m. w. of Magdeburg; machinery, copper goods, cloth; has anc. castle, famous library. Pop. 18,000.

Wollin (*wol'en*), island, Pomerania, Prussia, at entrance to Great Haff, opposite mouth of R. Oder; fishing and cattle rearing. Cap. Wollin. Area, 95 sq. m.; pop. 5,000.

Woll'ongong, coast tn., New South Wales, Australia, 48 m. s. of Sydney; centre of coal-mining and dairying region; coal exported. Pop. 7,600.

Wol'singham, par. and tn., Durham, England, 9 m. n.w. of Bishop Auckland; manufactures woollens, agricultural implements, tools; marble quarries. Pop. (par.) 3,500.

Wolstan'ton United, urb. dist., Staffs, England; in Potteries dist.; has also iron and steel works, silk and cotton mills. Pop. 30,500.

Wolverham'pton, co. bor., Staffs, England, 13 m. n.w. of Birmingham; centre of iron industry; manufactures electrical plant, motor-cars, zinc and tin wares, locks and keys. Pop. 133,200.

Wol'verton, urb. dist., Bucks, England, 10 m. n.e. of Buckingham; railway and printing works; practically continuous with Stony Stratford. Pop. 12,000.

Wombwell, tn., W. Riding, Yorks,

England, 4 m. s.e. of Barnsley; coal mines, brickyards. Pop. 18,400.

Woo'burn, tn., Bucks, England, 4 m. s.e. of Wycombe; paper and millboard mills. Pop. 4,650.

Wood'bridge, urb. dist., mkt. tn., Suffolk, England, on R. Deben, 7 m. e.n.e. of Ipswich; river port. Pop. 4,700.

Wood'ford, urb. dist., Essex, England, 10 m. n.e. of St. Paul's, near s. boundary of Epping Forest; part of Greater London; residential and holiday resort. Pop. 23,900.

Wood Green, urb. dist., Middlesex, England, 7 m. n. of St. Paul's, London; part of Greater London; contains Alexandra Palace. Pop. 54,200.

Wood'hall Spa, tn., Lincolnshire, England, 7 m. s.w. of Horncastle; mineral spring. Pop. 1,400.

Wood'stock. (1) Tn., Oxfordshire, England, 8 m. n.e. of Witney; manufactures gloves; near by are Blenheim Park and Palace, granted to Duke of Marlborough. Pop. 1,500. (2) Tn., Ontario, Canada, on Cedar Creek, 78 m. s.w. of Toronto; manufactures woollen goods, agricultural machinery, musical instruments; electric power supplied from Niagara. Pop. 10,000.

Wool'er, par. and tn., Northumberland, England, near Cheviot Hills; has large cattle and sheep markets. Pop. 1,600.

Woolwich (*wool'ich*), tn., r. London, England, on R. Thames; royal arsenal and dockyard; contains factories for guns, gun-carriages, torpedoes, and ammunition; saddlery and harness departments; large storehouses; barracks and military hospital; headquarters of Royal Artillery; seat of Royal Coll. for Engineering and Artillery. Pop. 146,900.

Woon'socket, city, Rhode I., U.S.A., on R. Blackstone, 15 m. n.w. of Providence; cotton, woollen, and worsted mills; rubber goods. Pop. 50,000.

Woot'ton Bas'sett, mkt. tn., Wilts, England, 6 m. w. of Swindon; large cattle markets; trade in agricultural produce. Pop. 2,100.

Worcester (*woos'ter*). (1) Co. tn.,

Worcestershire, England, on R. Severn; has fine cathedral, several old churches, and two grammar schools of Tudor foundation; manufactures porcelain, vinegar, chemicals, gloves, iron goods; large hop market. Pop. 50,500. (2) Tn., Massachusetts, U.S.A., on R. Blackstone, 44 m. w.s.w. of Boston; univ.; railway centre; important manufactures of wire, boots and shoes, metal goods, machinery. Pop. 197,000. (3) Tn., Cape Prov., S. Africa, 62 m. N.E. of Cape Town; wine, raisins; tanning and wagon building; ostrich farming. Pop. 4,200.

Worcestershire, inland co. of W. central England; bounded by Shropshire, Stafford, Warwick, Gloucester, and Hereford; crossed by several ranges of hills; well wooded; watered by Rs. Severn, Avon, Stour, Teme, and other streams; agriculture and market gardening important; fruit in Vale of Evesham and hops in R. Teme valley; chief crops, wheat and barley; cattle and sheep raised. Minerals include coal, iron, salt, limestone; manufactures are iron and steel goods, china, carpets, glass, gloves. Co. tn., Worcester. Area, 716 sq. m.; pop. 420,200.

Workington, mkt. tn. and port, Cumberland, England, at mouth of R. Derwent; manufactures steel rails, boilers, motor vehicles, paper; shipbuilding; coal mined in vicinity. Pop. 24,700.

Work'sop, tn., Notts, England, 12 m. N.N.E. of Mansfield, on R. Ryton, near N. extremity of Sherwood Forest; coal mining, making, woodwork; chemicals and agricultural implements. Pop. 26,300.

Worms (würms), tn., Hesse, Germany, on R. Rhine; cathedral; important river trade; manufactures wine, chemicals, paints, tobacco, leather, machinery. Here Luther defended his position at Imperial Diet (1521). Pop. 47,000.

Worthing, urb. dist., W. Riding, Yorks, England, 3 m. S. of Barnsley; collieries, gunpowder mills, sawmills. Pop. 12,400.

Worsley (wurs'li), urb. dist., Lanes, England, 6 m. N.W. of Manchester; cotton, iron and brick works, coal mines. Pop. 14,500.

Worthing, wat.-pl., Sussex, England, 12 m. W. of Brighton; mackerel fishing; cultivation of greenhouse fruit and flowers. Pop. 46,200.

Wotton-under-Edge (woo'ton), par. and tn., Glos, England, 19 m. N.E. of Bristol; grammar school (1382) is oldest in England. Pop. (par.) 3,000.

Wrang'el Island, isl., in Arctic Ocean, N.W. of Bering Strait; mountainous in interior; claimed by U.S.S.R. Area, c. 2,000 sq. m.

Wrexham (rex'am), munic. bor., Denbighshire, Wales, 11 m. S.W. of Chester; malt, iron, terra-cotta works, tanneries, and breweries. Pop. 18,600.

Wrotham (roo'tam), urb. dist., Kent, England, 6 m. N.E. of Sevenoaks; fine church. Pop. 4,500.

Wuehang', cap., Hupeh, China, on R. Yangtze Kiang, opposite Hankow; contains mint and cotton mills. Included in Hankow. Pop. c. 800,000.

Wuehow', tn., Kwangsi, China, on R. Sikiang, 125 m. W. of Canton; port of transhipment of sea-borne goods for the West; hides, oils, and sugar exported. Pop. 90,000.

Wuhu', treaty port, Anhui, China, on R. Yangtze Kiang; exports grain to the S.; coal, tea, silk produced in vicinity. Pop. 136,000.

Württemberg (voor-tem-berg), rep., S. Germany; bounded by Baden, Bavaria, and Switzerland. Surface undulating, rising to Black Forest in W.; drained by Rs. Danube, Neckar, and other streams; large area forested. Chief industry agriculture; wheat, oats, rye, potatoes, barley, and other crops cultivated; vines; livestock reared; minerals include salt, iron, limestone; manufactures textiles, paper, leather, hardware, beer, tobacco, spirits, firearms, gunpowder; Tübingen has univ. Cap. Stuttgart. Area, 7,530 sq. m.; pop. 2,580,000.

Würzburg (würts'boorg), tn., Bavaria, Germany, on R. Main; dates from 7th cent.; famous cathedral, royal

castle, univ. with celebrated medical school; breweries; mathematical, surgical, and musical instruments, machinery, printing presses; tobacco. Pop. 90,000.

Wurzen (*voor'tsen*), tn., Saxony, Germany, on R. Mulde, 16 m. E. of Leipzig; castle, cathedral; manufactures machinery, carpets, paper, leather. Pop. 18,000.

Wyandotte, tn., Michigan, U.S.A., 12 m. S.W. of Detroit; chemicals and bleaching powders. Pop. 28,000.

Wycombe (*wik'um*), CHEFFING or HIGH WYCOMBE, mkt. tn., Bucks, England, on R. Wy, trib. of R. Thames; manufactures chairs, cabinet work, and furniture. Pop. 28,000.

Wye (*wi*). (1) Mkt. tn., Kent, England, 10 m. S.W. of Canterbury; grammar school. Pop. 1,400. (2) Riv., Wales and England; rises in Plinlimmon; joins estuary of R. Severn; famed for beautiful scenery; length, 130 m.

Wymondham (*wind'am*), tn., Nor-

folk, England, 10 m. S.W. of Norwich; brush making, brewing. Pop. 4,800.

Wyoming (*wi-'o'-ming*), Mountain State, U.S.A.; bounded by Montana, S. Dakota, Nebraska, Colorado, Utah, and Idaho; traversed N. to S. by Rocky Mts. (Fremont Peak, 13,790 ft.), flanked on either side by plateaus from 7,000 to 8,000 ft.; watered by R. Green, Snake, Yellowstone, Big Horn, Powder, N. Platte, and other streams. Pine forests among the hills, and in N.W. is Yellowstone National Park. Climate temperate and healthy in lower districts; more severe in the mountains. Excellent grazing land, and large numbers of cattle and sheep raised; agriculture carried on by irrigation and dry farming, vegetables, fruits, and cereals cultivated. Mining most important industry; minerals include petroleum, coal, copper, iron, limestone. Chief towns, Cheyenne (cap.) and Casper. Area, 97,914 sq. m.; pop. 194,000.

X

Xanthi (*xan'the*), tn., N.E. Thrace, Greece, on R. Mesta; noted for tobacco. Pop. 25,000.

Xenia (*zen'ya*), tn., Ohio, U.S.A., near R. Little Miami, 16 m. S.E. of Dayton; ropes, twine, boots and shoes. Pop. 9,000.

Xeres. See JEREZ.

Xingu (*shing-goo'*), riv., Brazil, S. America; rises in plateau of Matto Grosso; flows N., and enters R. Amazon at beginning of estuary; numerous waterfalls; navigable for 110 m. Length, 1,300 m.

Y

Y, or **IJ** (*i*), S.W. arm of Zuider Zee, N. Holland, Holland; now largely drained; joined to North Sea by North Sea Canal; R. Amstel enters at Amsterdam.

Yablonof, mt. range, Siberia; extending N.E. from Urga till it merges in Stanovoi Mts.; separates basins of rivs. Amur and Lena.

Yakima, tn., Washington, U.S.A., 165 m. S.E. of Seattle; centre of

productive agricultural region, producing fruits, vegetables, live-stock, and grain. Pop. 18,000.

Yakutsk (*ya-kootsk'*). (1) Republic, U.S.S.R.; bounded N. by Arctic Ocean, W. by Siberian Area, S. and E. by Far Eastern Area. Surface level in N., mountainous in S.; drained by R. Lena and tribs.; numerous lakes; much forest; produces rye, barley; cattle and horses raised;

exports furs and ivory; chief mineral, gold. Area, 1,600,000 sq. m.; pop. c. 279,000. (2) Cap. of above, near R. Lena; wooden houses built on marshy plain; furs. Pop. 10,000.

Yalding (*yaw'ding*), par. and vil., Kent, England, 6½ m. s.w. of Maidstone; hops and fruit are largely grown. Pop. (par.) 2,600.

Yalu (*ya-lau*), riv., Korea; for most of its course forms boundary between Korea and Manchuria. Upper basin richly forested; much timber floated down to Wi-ju, below which river is navigable; length, 300 m.

Yam'bol, tn., Bulgaria, on R. Tunja, 48 m. w. of Burgas; agricultural dist. Pop. 23,000.

Yani'on, or **YANAM**, French possession, India; near mouth of R. Godavari; under govt. of Pondicherry. Area, c. 5 sq. m.; pop. 5,000.

Yangtze Kiang, largest riv. and chief commercial highway of China; rises in mts. of Tibet; traverses central provinces of China, and after tortuous course of c. 3,000 m. through densely populated region, enters Yellow Sea near Shanghai; receives numerous tributaries; communicates by Grand Canal with Hwang-Ho R.; navigable to Ichang (1,726 m.).

Yan'nina, formerly **JANINA**, tn., N. Epirus, N.W. Greece, on L. Yannina; seat of archbishop; manufactures gold and silver embroidered goods. Pop. 21,000.

Yap, Japanese isl., Caroline group, N. Pacific Ocean; cable station to which U.S.A. has free access. Area, 79 sq. m.; pop. 7,500.

Yarkand, tn., Sinkiang, China, on oasis in R. Tarim basin; important trade centre; produces wheat, rice, beans, and fruit; manufactures leather, saddlery, carpets, textiles. Pop. c. 90,000.

Yar'mouth. (1) Or **GREAT YARMOUTH**, co. bor., seapt., and wat.-pl., Norfolk, England, at mouth of R. Yare; fine parish church; great centre of herring and deep-sea fishing; noted for Yarmouth bloaters; ship and boat building; manufactures

ropes, nets. Yarmouth Roads is an anchorage off the port, protected by sandbanks. Pop. 56,800. (2) Small seapt., Isle of Wight, England, on Solent; yachting station. Pop. 900. (3) Seapt., s.w. Nova Scotia, Canada; shipbuilding; exports fish and lumber. Pop. 7,000.

Yaroslav'l, formerly **JAROSLAV**. (1) Prov., Russia; consists of broad depression traversed by Upper R. Volga; much marsh and forest; flax widely grown; important dairying industry. Area, 12,680 sq. m.; pop. 1,338,000. (2) Cap. of above, at junction of Rs. Volga and Kotorost, 150 m. N.W. of Moscow; 13th cent. cathedral; cotton, tobacco, leather, and linen. Pop. 112,000.

Yar'row Water, riv., Selkirkshire, Scotland; flows through Loch of the Lowes and St. Mary's Loch to enter Ettrick Water 2 m. above Selkirk; trout fishing; famous in Scottish song and legend. Length, 25 m.

Yassy. See **JASSY**.

Yea'don, urb. dist. and par., W. Riding, Yorks, England, 8 m. N.W. of Leeds; woollen goods. Pop. 7,700.

Yell. See **SHETLAND ISLANDS**.

Yellow River. See **HWANG-HO**.

Yellow Sea, or **HWANG-HAI**, inlet of Pacific Ocean, N. China, between Chinese coast and Korea; Pohai Gulf forms its N. extension; shallow owing to great deposit of silt received from Hwang-Ho or Yellow R.

Yellowstone National Park, N.W. Wyoming, U.S.A., region of cañons, cataracts, hot springs, geysers, and mud volcanoes; Yellowstone R. passes through Grand Cañon. Geysers are finest in world. Most of area thickly forested. Region was set apart as a national park (1872). Many species of animals which have elsewhere been exterminated have found refuge here. Area, 3,350 sq. m.

Yemen. See **ARABIA**.

Yenisei (*yen-e-sä'*), riv., Siberia; rises in N.W. Mongolia and flows N. through thinly populated country to Arctic Ocean; ice-bound in winter;

much flooding in spring; has many navigable stretches; length, 2,700 m.

Yeniseisk (*yen-e-säsk'*), tn., Siberian Area, U.S.S.R., on Yenisei R.; gold-mining centre. Pop. 6,000.

Yeovil (*yö'vil*), mkt. tn., Somerset, England, on R. Yeo; 14th cent. church; manufactures gloves. Pop. 19,100.

Yetholm (*yeth'um*), par. and double vil., Kirk-Yetholm and Town-Yetholm, on Bowmont Water, Roxburghshire, Scotland, $7\frac{1}{2}$ m. s.e. of Kelso; formerly headquarters of a tribe of gipsies. Pop. 540.

Yezd, city, Persia, 160 m. s.e. of Isfahan; trading centre on several important caravan routes. Pop. c. 30,000.

Yezo. See **HOKKAIDO**.

Yiewsley and West Drayton, urban dist., Middlesex, England, $2\frac{1}{2}$ m. s. of Uxbridge; part of Greater London; brick making. Pop. 13,100.

Yochow, city, Hunan, China, on R. Yangtze Kiang; walled; opened to foreign trade (1900). Pop. c. 20,000.

Yokohama (*yö-kö-hä'ma*), seaport, Japan, on Tokyo Bay; large trade, chiefly in silk, silk goods, and tea. Practically destroyed by earthquake (1923); since rebuilt. Pop. 519,000.

Yokosuka, seaport, Japan, 12 m. s. of Yokohama; shipbuilding, dockyards, arsenals. Pop. 96,000.

Yola (*yö'lä*), prov., N. Nigeria, W. Africa; fertile; watered by R. Benue; rice, cotton, tobacco. Cap. Yola. Area, 16,000 sq. m.; pop. c. 300,000.

Yonkers, city, New York, U.S.A., on Hudson R.; residential suburb of New York; carpets, sugar, hats, rubber goods, photographic supplies. Pop. 135,000.

Yonne (*yön*), dep., France; hilly and undulating; forests in N.; drained by R. Yonne, trib. of R. Seine; very fertile, producing cereals, wine; forestry, mining, sugar refining, glass making. Cap. Auxerre. Area, 2,892 sq. m.; pop. 277,000.

York. (1) Co. tn., Yorks, England, at junction of Rs. Foss and Ouse; still has old walls and several old gate-

ways ('bars'); Roman remains; archbishop's see; fine cathedral (minster), dating in part from 12th cent.; famous Five Sisters window, restored (1925); other interesting old churches, and ruins of Benedictine monastery; important railway and agricultural centre; manufactures flour, beer, hardware, glass, confectionery, leather, and artificial manure. Pop. 84,800. (2) City, Pennsylvania, U.S.A., 96 m. w. of Philadelphia; manufactures agricultural implements, cars, confectionery, tobacco. Pop. 55,000.

Yorkshire, largest co. of England; bounded by Westmorland, Durham, North Sea, Lincolnshire, Nottinghamshire, Derbyshire, Cheshire, and Lancashire. Undulating surface slopes w. to Pennine Chain. Centre of county is plain known as Vale of York; E. of this are two groups of hills, York Moors in N. and York Wolds in S.; drained by Rs. Hull, Derwent, Swale, Ure, Nidd, Yorkshire Ouse, Wharfe, and Aire (all of which belong to basin of R. Ouse, and by R. Don, both Ouse and Don entering Humber estuary; in N. a small portion drains to R. Tees. County is divided into three Ridings (from O.E. *thriding*, 'third part'); in E. Riding industries are mainly centred about Hull; in N. Riding there is coal, iron, salt, lead, barytes; and W. Riding has a large coalfield, with manufactures of woollens, linen, cutlery, hardware, as well as iron smelting. Agriculture is carried on, especially in E. Riding; chief crops are oats, barley, and wheat; horses, cattle, and sheep are raised; important fisheries. Chief tns., York (cap.), Leeds, Sheffield, Bradford, Huddersfield, Hull, Middlesbrough. Area, 6,071 sq. m.; pop. 4,304,700.

Yorkton, tn., Saskatchewan, Canada, 105 m. N.E. of Regina; centre of agricultural dist. Pop. 5,150.

Yorktown, tn., Virginia, U.S.A., 10 m. above mouth of York R.; here Cornwallis surrendered to Washington (1781). Pop. 150.

Yosemite (*yö-sem'it-ä*), valley, in

w. slope of Sierra Nevada Mts., California, U.S.A.; enclosed by walls of rock rising 3,000-5,000 ft.; traversed by R. Merced; numerous cascades; magnificent scenery; discovered in 1851; established as a state park (1864); tourist resort.

Youghal (*yau*), seapt. and wat.-pl., co. Cork, I.F.S., on Youghal harbour, at estuary of R. Blackwater; exports corn; fisheries; manufactures earthenware and bricks. Pop. 5,600.

Youngstown, city, Ohio, U.S.A., 65 m. S.E. of Cleveland; manufactures iron and steel. Pop. 170,000.

Ypres (*épr*), tn., W. Flanders, Belgium, 35 m. S. of Ostend; chief industries, manufacture of woollen goods, printed cottons, linens, and lace; tanneries and dyeworks. During Great War Ypres was centre of salient (1914-18), held by Brit. and French troops, and city, including famous Cloth Hall, was reduced to ruins; after the war town was rebuilt. The famous Menin Gate was opened (1927) as memorial to missing Brit. soldiers. Pop. 15,000.

Ystad (*us'tad*), seaport, S. Sweden, on Baltic Sea; flour, saw, and sugar mills. Pop. 11,000.

Yucatan (*ü-ha-tan*), peninsula, Central America; includes Mexican states of Campeche and Yucatan as well as parts of Brit. Honduras and Guatemala; surface flat, with Sierra de Yucatan crossing centre; few rivers; produces maize, rice, cotton, tobacco, sisal hemp, sugar-cane; fine forests, with mahogany and other valuable trees. Area, 55,400 sq. m.; pop. c. 400,000.

Yugoslavia, kingdom, S.E. Europe; bounded N. by Austria and Hungary, N.E. by Romania, E. by Bulgaria, S. by Greece, W. by Albania, Adriatic Sea, and Italy. Comprises former states of Serbia, Montenegro, Bosnia and Herzegovina, Dalmatia, Croatia, and Slovenia. In W. are the Dinaric Alps; remainder mostly occupied by Rhodope Mts.; low-lying river plains are economically very important. Principal rivers are Danube, Drava,

Sava in N., Vardar flowing to Aegean Sea. Apart from Karst lands in N.W., surface is mostly forest and grazing areas; live-stock reared and exported; agriculture widely practised, principal crops being wheat, barley, rye, oats, maize, grapes, and other fruits; tobacco and silk culture also important. Minerals undeveloped. Important industries are flour milling, brewing, distilling; cotton manufacture still in stage of early development. Yugoslavia suffers also from lack of seaports, but has access to Fiume and Salonica. Chief tns., Belgrade (cap.), Subotica, Sarajevo, and Novi Sad. Area, 96,134 sq. m.; pop. 12,017,000.

Yukon. (1) Terr., Canada, bounded by Arctic Ocean, N.W. Terrs., Brit. Columbia, and Alaska; created a Territory (1898) after discovery of gold in Klondyke; mountainous (Mt. Logan, 19,800 ft., highest mt. in Canada); drained by R. Yukon; gold, silver, and coal mining; abounds in big game; cap. Dawson. Area, 207,076 sq. m.; pop. 4,000. (2) Riv., Yukon and Alaska, formed by union of Rs. Lewes and Pelly at Fort Selkirk; flows N.W. into Alaska, then S.W.; empties by great delta into Bering Sea; chief tribes are Stewart White, Selwyn, and Klondyke rivers; navigable from June till Sept. to L. Bennett, source of R. Lewes. Length, c. 2,300 m.

Yunnan. (1) Prov., S.W. extremity, China Proper; central part consists of a lofty plateau sloping towards S.E. and studded with lakes; very mountainous in N. and W.; traversed by parts of Rs. Yangtze Kiang, Mekong, Salwin, and Songkoi; rich mineral resources include copper, coal, lead, zinc, and silver; agricultural products include rice, maize, buckwheat. Area, 146,680 sq. m.; pop. c. 10,000,000. (2) Cap. of above; walled and intersected by canals; increasing trade since opening of railway from Tongking; manufactures silk and leather goods. Pop. c. 45,000.

Yusovka. See **STALIN**.

Z

Zaandam (*zan-dam'*), tn., N. Holland, on R. Zaan, 6 m. n.w. of Amsterdam; paper works, oil and saw mills; cement, colours. Pop. 32,000.

Zabern. See SAVERNE.

Zabrze. See HINDENBURG.

Zacatecas (*tha-ka-ta'has*). (1) State, Mexico, belonging to the central plateau; cereals, sugar, and fruit grown; rich in minerals, silver, gold, iron. Area, 24,471 sq. m.; pop. 379,000. (2) Cap. of above; silver mines, pottery. Pop. 15,000.

Zaffarines. See CHAFFARINES.

Zagazig', tn., Nile Delta, Egypt; centre of cotton and grain trade. Pop. 53,000.

Zagreb, formerly AGRAM, chief tn., Croatia-Slavonia, n.w. Yugoslavia, on R. Sava; Gothic cathedral; univ.; linen, carpets, leather, tobacco. Pop. 108,000.

Zambezi, large riv., E. Africa; generally regarded as n. limit of S. Africa; rises in n.w. Rhodesia, near R. Congo; general course s.e.; flows through Portuguese W. Africa, Rhodesia, Portuguese E. Africa; enters Indian Ocean by several branches (most important Chinde). Length, 2,200 m.; navigable for c. 1,700 m. in three separate sections, navigation being interrupted by falls and rapids; most important falls, Victoria Falls, in Rhodesia. Principal tribs. are Lungwebungu, Kwando, Shire. Discovered by Livingstone.

Zamboanga, tn., w. Mindanao, Philippine Islands; important commercial centre; chief products, timber, rice, copra, sugar, and tobacco. Pop. c. 44,000.

Zamo'ra. (1) Prov., Leon, Spain; drained by R. Douro; generally level; agricultural; wheat, wine. Area, 4,097 sq. m.; pop. 266,000. (2) Cap. of above; anc. walled city; fine cathedral; wine, coarse linen, wheat. Pop. 17,000.

Zanesville, city, Ohio, U.S.A., 34 m. e. of Columbus; pottery, textiles, machinery, railway material. Pop. 36,000.

Zan'te. (1) Isl., Ionian group, Greece; surface fertile plain with hills in w.; currants, olives; subject to earthquakes. Area, 277 sq. m.; pop. 40,000. (2) Cap. of above; manufactures carpets, gold and silver articles. Pop. 13,000.

Zanzibar'. (1) Isl., E. Africa, 20 m. from coast of Tanganyika Terr. Climate hot and moist. Staple product, cloves. Area, 680 sq. m.; pop. 115,000. (2) Tn. on w. coast of above; cap. of Protectorate; most important trade centre of E. Africa; excellent harbour; former great slave market; exports cloves, copra, soap, and ivory. Pop. c. 60,000. (3) PROTECTORATE, consisting of islands of Zanzibar, Pemba, and adjacent small islands; provides bulk of world's supply of cloves. Protectorate established (1890). Area, 1,020 sq. m.; pop. 217,000.

Zapor'ozhe, formerly ALEXANDROVSK, tn., Ukraine, U.S.S.R., on R. Dnieper; riv. jn.; motors; agricultural machinery. Pop. 55,000.

Zar'a, seapt., Italy, in enclave in Dalmatia, e. coast of Adriatic; manufactures maraschino, flour, wax, glass; cathedral (13th cent.); seat of Catholic archbishop and Greek bishop. Pop. 18,000.

Zaria (*za-re'a*), prov., N. Provinces, Nigeria; cotton-producing region. Cap. Zaria, 87 m. s.w. of Kano. Area, 23,695 sq. m.; pop. 1,031,000.

Zatec (*zha'tets*), formerly SAAZ, tn., n.w. Bohemia, Czechoslovakia, on R. Ohre; centre of hop trade; manufactures sugar and leather. Pop. 16,000.

Zealand, largest isl., Denmark, between Kattegat and Baltic Sea; surface low-lying and undulating; fertile and well-cultivated; fine beech

woods; on isl. is Copenhagen, the Danish cap. Area, 2,636 sq. m.

Zeebrugge (*zā-broog'ē*), seaport, Belgium, 9 m. n. of Bruges, with which it is connected by ship canal; harbour is protected from silting by crescent-shaped mole, $1\frac{1}{2}$ m. long and nearly 100 yds. wide. Steamer service to Harwich. During Great War was German submarine, destroyer, and seaplane base; destroyed by British (April 1918). Monument erected (1920) commemorates this exploit.

Zee'land, most s. maritime prov. of Holland; comprises six islands, with strip of land along w. bank of R. Schelde; surface flat and mostly below sea-level; protected by dikes; soil fertile; fishing. Cap. Middelburg. Area, 707 sq. m.; pop. 250,000.

Zeitz (*tsits*), tn., Saxony, Prussia, on R. White Elster, 23 m. s.w. of Leipzig; manufactures textiles. Pop. 35,000.

Zemun, formerly **SEMLIN**, tn., Yugoslavia, on R. Danube, opposite Belgrade; important transit trade in grain, fruit, and timber. Pop. 18,000.

Zenjan, cap. Khamseh Prov., Persia, 175 m. n.w. of Tehran; trade in carpets. Pop. 25,000.

Zenta. See **SENTA**.

Zerbst (*tserpst*), tn., Anhalt, Germany, on R. Nuthe, 27 m. s.e. of Magdeburg; manufactures jewellery, machinery, beer. Pop. 10,000.

Zermatt, vil., Valais, Switzerland, at foot of Matterhorn; tourist centre; alt. 5,315 ft. Pop. 800.

Zhitomir. See **JITOMIR**.

Zhob. (1) Dist., N.E. Baluchistan; hilly, intersected in s. by great valley of Zhob R.; dry, bracing climate; wheat, maize, fruits; asbestos, chromite, salt produced. Area, 9,626 sq. m.; pop. 57,000. (2) Riv. in above, flows N.E. to join R. Gomal after course of c. 240 m.

Zimbabwe, **GREAT**, collection of ruins, S. Rhodesia, Africa, 17 m. s. of Victoria; original purpose unknown, but may have been a stronghold and place for smelting and purifying ores; rediscovered in 1867.

Zin'der, tn., Niger Colony, French W. Africa, 135 m. N.E. of Kano; surrounded by earthen walls; trade in cottons, silks, ostrich feathers, salt, spices; military post. Pop. 6,000.

Zinovievsk (*sin-ov-ē-dusk*), formerly **ELIZABETGRAD**, tn., Ukraine, U.S.S.R., 140 m. n. of Odessa; smelting, distilling, and brewing; soap, bricks, tobacco. Pop. 65,000.

Zirian. See **KOMI**.

Zittau (*tsit'ou*), tn., Saxony, Germany, 50 m. s.e. of Dresden; damasks and woollen goods; lignite mines in vicinity. Pop. 38,000.

Zlatoust (*zlā-tō-oust*), tn., Ural Area, Russia; in Ural Mts., 120 m. s. of Sverdlovsk; observatory; mining centre for gold and iron; ironworks and manufacture of machinery. Pop. 48,000.

Znojmo (*znoi'mo*) (German **Znaim**), tn., Czechoslovakia, 45 m. n. of Vienna; vegetables, especially cucumbers, grown; manufactures pottery. Pop. 21,000.

Zom'ba, cap., Nyasaland Protectorate, E. Africa, on slope of Mt. Zomba, at alt. of 3,000 ft.; tobacco and cotton cultivated. Pop. (whites) 250.

Zombor. See **SOMBOR**.

Zout'pansberg, mt. range, N. Transvaal, Africa; gold and copper mines.

Zug (*tsoog*). (1) Canton, Switzerland, N.E. of L. Lucerne; mountainous in s. and s.e.; watered by R. Reuss; inhabitants mainly German-speaking and R.C. Area, 92 sq. m.; pop. 32,000. (2) Cap. of above, on L. Zug; enamel and metal articles. Pop. 9,000.

Zuider Zee (*zoi'der zā*), shallow inlet of North Sea, Holland; originally a small inland lake; united to North Sea by inundations in 13th cent. Depth, 10 to 19 ft.; area, 1,428 sq. m. Dikes are in process of construction, separating the North Sea from the Zuider Zee, by which it is hoped to reclaim over 800 sq. m. of land, thus adding one-tenth to the cultivable area of Holland.

Zululand, N.E. dist. of Natal,

S. Africa. Surface mountainous, with low plains in n. and e. Drained by R. Tugela, which forms part of s.w. boundary. Climate unhealthy on coast. Produces cereals, sugar, coffee, tea, tobacco; cattle and sheep raised. Gold and coal exist, but are little worked. Area, 10,450 sq. m.; pop. 251,000.

Zurich (*tsoo-rich*). (1) Canton, n. Switzerland; contains large part of L. Zurich and several smaller lakes; belongs to basin of R. Rhine; surface hilly (highest point, 3,012 ft.); fertile valleys; manufactures cotton, silk; inhabitants mostly German-speaking Protestants. Area, 667 sq. m.; pop. 539,000. (2) Cap. of above, on L. Zurich; chief commercial and industrial city of Switzerland. Notable buildings include Grossmünster (Romanesque cathedral, begun 11th cent.); Wasserkirche (containing famous library); national museum; town hall and Pestalozzianum; univ.; fine bridges, etc. Chief industries are silk weaving, cotton spinning; manu-

facture of machinery and paper. Pop. 207,000. (3) Lake in above canton. Length, 25 m.; greatest width, 2½ m.

Zut'phen, or **ZUTFEN**, tn., Gelderland, Holland; tanneries, paper, and oil works; trade in grain, timber; Sir Philip Sidney killed here (1586). Pop. 19,000.

Zvenigorodka (*zvin-i-gor-od'ka*), tn., Ukraine, U.S.S.R.; 100 m. s. of Kiev; tobacco; trade in grain and agricultural produce. Pop. 40,000.

Zweibrücken (*tswi'brook-en*), town, Rhine Palatinate, Bavaria, Germany, 48 m. n.w. of Strasbourg; manufactures machinery, leather, silk. Pop. 16,000.

Zwickau (*tsvik'ou*), tn., Saxony, Germany, 20 m. s.w. of Chemnitz; coalfields; machinery, chemicals, motors, glass, and wire goods; birthplace of Schumann. Pop. 80,000.

Zwolle (*tswol'e*), tn., Overijssel, Holland; cotton; ironworks; boat building; important canal centre. Pop. 39,000.

DICTIONARY OF GEOGRAPHICAL TERMS

NOTE.—Names printed in small capitals, and occurring in the course of an article, indicate that there is a special article under that head.

Aborigines (*ab-or-ij'in-ēs*), the first inhabitants of any country, or those in possession of it at time of its discovery or colonization by civilized peoples. The adjective, *aboriginal*, is also applied to the original FAUNA and FLORA of any region.

Afforestation, the planting of land with trees whether for timber or hunting grounds. In N. America, Scandinavia, New Zealand, and other timber-exporting areas the planting of young trees (*reafforestation*) accompanies cutting, so that future supplies of timber may be assured.

Agave (*ā-gā'vē*), a plant originally found in dry, tropical Americas; now cultivated also in E. Africa, the Philippine Islands, etc. It has thick, fleshy leaves with sharp edges and tips. The fibres of the leaves yield sisal hemp; in Mexico the fermented juice is a favourite drink called *pulque*. See SISAL.

Ainos (*ī'nōs*), or **AINU**, a rapidly dwindling race of people living in Hokkaido, Japan, and Sakhalin; probably a remnant of the aboriginal inhabitants. They are short of stature but strongly built, and their bodies are frequently covered with short, bristly hair; their features are European rather than Mongolian. Chief occupations are hunting and fishing; number c. 15,000.

Air Port. See PORT.

Air Routes. With the rapid develop-

ment of aviation, both during and since the Great War, the question of routes suitable for aircraft has come to be of great importance. The chief factors to be taken into account are the surface of country flown over, mountainous or otherwise, and the weather conditions; in long-distance flights the direction of prevailing winds is as important as it was for sailing ships. Suitable sites for aerodromes and the provision of meteorological and wireless services must also be considered. See TRANSPORT.

Al'fa, or **Halfa**, the N. African name of *esparto*, a grass of Algeria, Tunis, and s. Spain, used chiefly in paper making.

Alfa'fa, the Spanish name for *lucerne*, and also known as Spanish trefoil or purple medic, is a Mediterranean fodder plant resembling clover. It is now widely cultivated, especially on irrigated lands in the temperate Americas, S. Africa, Australia, etc. By fixing nitrogen from the air the plant tends to enrich the soil.

Allspice. See PIMENTO.

Alluvium, very fine particles of soil or sand (silt) carried by running water and deposited in river beds, along river banks during floods, in lakes and deltas, and on seashores; fertile plains may thus be formed (e.g. valley of R. Po).

Alpaca (*al-pāk'ā*), an animal resembling a sheep, but with a long neck,

found on the high plateaus of the Andes. It is of the camel family, and is closely related to the llama. The alpaca is domesticated for the sake of its soft, silky wool, from which fine cloth (alpaca) is made, especially at Saltaire, Yorks. See also LLAMA, VICUÑA.

Aluminium, a white, light, but strong metal, largely used in the motor-car industry, and essential in aircraft construction. It is extracted from its ore in countries with large water-power resources (e.g. U.S.A., Germany, Norway, France, Switzerland, Canada). See BAUXITE.

An'eroid. See BAROMETER.

Ango'ra Goat, a species of goat, a native of the steppes of Asia Minor, whence it was introduced (c. 1840) into S. Africa. Its wool, known as *mohair*, is noted for its long, fine, soft, silky qualities, and is used for making a cloth called *angora*.

Antarctic Circle. See LATITUDE.

An'thracite, a very hard variety of coal, with bright surface and free from dust, burning with little flame, but giving intense heat; it contains 90-95 per cent. of carbon. It is mined in S. Wales and E. Pennsylvania, U.S.A. Anthracite is burned in house-stoves in large cities (e.g. Paris, New York), and is used also for smelting iron.

Anticyclone (*an'ti-si'klōn*), or **HIGH**, an area of high air pressure in which the ISOBARS form a series of roughly concentric rings, indicating a steady rise of pressure inwards towards the centre. Over the centre the descending air is cool and dry; it moves outwards as a gentle wind-whirl, blowing clockwise in the N. hemisphere, anti-clockwise in the S. hemisphere. Anticyclonic weather is marked by clear skies with cool and misty mornings and evenings, between which the days are generally sunny and rainless in summer, but often dull and foggy in winter. Anticyclones usually persist for several days. See CYCLONE, WIND.

Antip'odes, that part of the earth's surface which is diametrically oppo-

site one's own country. In the British Isles the name is often used to mean New Zealand or Australia.

Archipelago (*ar-ki-pel'agō*), a group of islands. The name was at first given to the Ægean Sea, and was later applied to any large group of islands, or to a sea studded with many islands.

Ar'eca Nut. See BETEL NUT.

Arête (*a-rēt'*), a roof-like ridge of steep rock above the snowline, formed by the action of frost. The term is mostly used in connection with mountaineering, particularly in Switzerland.

Ar'rowroot, a nutritious flour-like foodstuff prepared from the underground stems of the tropical American arrowroot plant; it is exported from Jamaica, Bermudas, India, etc.

Artesian Wells, wells bored to reach underground water which either rises by pressure or is pumped to the surface. Such wells may be as much as 5,000 ft. deep. The water varies in warmth according to the depth from which it rises, one deep well in Queensland, Australia, yielding water nearly boiling hot. Artesian water may also be either fresh or saltish; when pure it can be used for domestic, industrial, and agricultural purposes, but it is sometimes too saline for the irrigation of crops. Numerous wells have been sunk in Australia, the Sahara, U.S.A., etc.; the oldest known in Europe were in Artois (France), from which the name *artesian* is derived.

Artificial Silk. See SILK.

Asbes'tos, a whitish, lustrous, and fibrous mineral found in E. Canada (Thetford), Italy, and Russia. It is not affected by fire, and is used in making gas stoves, fireproof curtains, covering for steam-pipes, etc.

At'mosphere, the air surrounding the earth. It is composed mainly of a mixture of the gases nitrogen and oxygen, and is of the greatest importance. The oxygen is required to support human, animal, and vegetable life. Without the atmosphere, sound could not be carried, the sun's heat

could not be retained, and wind, rain, etc.—the various things making up weather—would not take place. It can expand and contract, can carry varying quantities of water vapour, and exerts pressure (c. 15 lb. per sq. in.). The height of the atmosphere is at least 200 miles.

Atoll. See CORAL.

Avalanche (*av'a-lan-sh*), a mass of snow, usually mixed with ice, soil, and stones, sliding at great speed down a mountain slope, often causing much damage to villages and forests.

Ax'is (of the earth), the imaginary line joining the N. and S. poles, and passing through the centre. Round this axis the earth rotates.

Az'tecs, the most important of the native N. American peoples, dominant in Mexico at the time of the Spanish invasion under Cortes in 1519; their tradition was that they came from N. The chief tribe had its cap. at Tenochtitlan, now the city of Mexico, and had founded the Empire of Mexico. They possessed a high degree of culture, but their religious rites were debased by human sacrifice. A few descendants, still speaking the ancient language, are to be found in outlying villages round the city of Mexico.

Bactrian Camel. See CAMEL.

Banan'a, the fruit of a plant grown everywhere in the tropics. The plant requires a deep soil with abundant heat and moisture. The fruit is largely exported from Central America and the W. Indies. A subtropical variety formerly obtained from the Canary Islands is now of less importance. The *plantain*, belonging to the same family, must be cooked before it is eaten.

Ban'tu, name applied to various tribes of Negroes, chief amongst whom are Kafirs and Zulus, living in that part of Africa lying S. of 5° N. of the equator. Name is also used for the large group of languages and dialects spoken by these peoples.

Bar (of river), a bank of sand, gravel, or silt deposited at the mouth

of a river where its current is checked by the sea, and forming a hindrance to navigation.

Barom'eter, an instrument for measuring the pressure or weight of the atmosphere. The mercury or Torricellian barometer was invented in 1643 by Torricelli. It consists of a glass tube about 34 in. long and sealed at one end. This is filled with mercury, inverted, and placed vertically in an open dish of mercury. The height at which the mercury in the tube remains above the level of the mercury in the dish indicates the pressure of the atmosphere on the surface of the open cistern, and this height is measured by means of a graduated scale. Normal pressure is c. 15 lb. per sq. in. Another form is the aneroid barometer, consisting of a thin metal box completely emptied of air. The shape of the box alters with different pressures, the alterations being shown on a dial by a pointer.

Barrier Reef. See CORAL.

Barter, exchange of articles without use of money or credit; e.g. cotton cloth or coloured beads for African native products, blankets for furs in Canada.

Basin (river), the area of land drained by a river and its tributaries. The term basin is also used to denote the area draining to one sea (e.g. Mediterranean Basin).

Basques (*basks*), people inhabiting certain provinces of N.E. Spain—Vizcaya, Guipuzcoa, and Alava (the Basque provinces), with part of Navarre—besides a small part of Department of Basses-Pyrénées, France. In Spain they remained independent till 1876, and in France till the Revolution. They are of good height and physique, fair-skinned and fair or dark-haired; brave, intelligent, ardent and enthusiastic, religious but full of prejudices and superstitions, and easily angered, especially where their pride is concerned; long famous as daring seamen. Their origin and race are unknown, and their language unrelated to any other known tongue.

Basu'tos, powerful nation of Bantu-speaking people inhabiting the Crown Colony of Basutoland, S. Africa, and composed of a large number of different tribes brought into union in the 19th century under the leadership of a famous chief, Moshesh. They are one of the most intelligent of coloured races, and are practically self-governing. They number c. 550,000.

Bathorographical. See MAP.

Bauxite (*bô'zit*), clay containing alumina found at Les Baux, S.E. France (whence the name), Antrim, U.S.A., W. Indies, and elsewhere. From it ALUMINIUM is extracted in the very high temperatures available in electric furnaces at Niagara Falls, L'Argentière (France), Kinkochleven (Scotland), etc.

Beaches, RAISED, terraces of land at different heights above present sea-level which at one time were sea-beaches. They are due to the rising of the land or the sinking of the sea. Many raised beaches exist round the shores of Scotland, at 25, 50, 75, and 100 ft. above the level of the present beach.

Beasts of Burden. See TRANSPORT.

Bêche de Mer (*besh*), also called *trepang*, *sea-slug*, *sea-cucumber*, a soft, slimy worm-like animal, 6-24 in. long, found on coral reefs and in shallow tropical seas between E. Indies and N. Australia; when cooked and sun-dried it is a favourite dainty among the Chinese.

Bedouin (*bed'oo-ên*), certain Arab tribes who lead a nomadic life in the deserts of Arabia and N. Africa. Their mode of life makes them fiercely independent and jealous of their liberty; extremely hospitable where their confidence is won; their love of warfare and of plunder makes them suspicious and treacherous. They are chiefly Mohammedans in religion, but acknowledge no authority except that of their own sheiks or chiefs.

Beet, the name for several varieties of a plant with large, broad leaves and a long tap-root. Common varieties

are *mangold* or *mangel-wurzel*, grown as food for cattle; *red beet*, used as a vegetable; and *white beet* or *sugar beet*, widely cultivated for making beet-sugar in central Europe, U.S.A., and now also in Great Britain.

Belts, or **ZONES**, areas of the earth's surface within which certain types or conditions of climate (e.g. temperature, pressure, rainfall), vegetation, or human culture are most markedly seen. Such belts usually merge into one another, the most typical example of any condition or type being found near the centre of each belt.

Ber'bers, a people, numbering c. 10,000,000, originally occupying the part of Africa between the Mediterranean and the Sahara, and between Egypt and the Atlantic; but now, owing to Arab immigration, widely scattered and found chiefly in the Atlas Mountains and in desert areas to the S. They are a white race, of good physique, with dark hair and brown or hazel eyes; a warlike people constantly striving either with their neighbours or among themselves, Mohammedans in religion, and very superstitious. In many parts they are engaged in agriculture, following primitive methods, or in various industries, such as the working of iron and the manufacture of swords, guns, and gunpowder. The chief tribes are the Kabyle (Algeria), the Shehuh and Riffs (Morocco), and the Tuareg (desert regions).

Bergschrund (*bârg'shroond*), a great crack in ice or snow, often reaching down to the solid rock underneath, where a snowfield or a glacier leaves a gentle slope to move down a steeper mountainside. At the bottom of the crack are blocks of ice and large pieces of rock.

Bet'el Nut, the nut of the Areca palm, so called because the nut is rolled in a leaf of the betel, a variety of pepper plant, together with a little shell lime, and is then chewed in India and E. Indies. It is said to sweeten the breath, strengthen the gums, promote digestion, and act as

a stimulant. It is an important article of commerce in the East.

Bise (*béz*), a cold, dry, keen N. and N.E. wind which blows in S. France (Rhône Valley) and Switzerland. It is often accompanied by heavy cloud, and it shrivels up vegetation.

Black Earth, a dark-coloured, fertile soil covering parts of S. Russia, Hungary, and Romania, on which large crops of wheat and maize are grown. See also **LOESS**.

Boers (*bōers*), originally Dutch colonists of S. Africa engaged in agriculture and cattle farming; now, more widely, the whole Dutch population of S. Africa, especially of Transvaal and Orange Free State.

Bō'ra ('north wind'), a violent, cold, dry N.E. wind which blows over the KARST towards the Adriatic Sea, mainly in winter and spring, and usually during the daytime.

Bore, or **EAGRE**, a deep tidal wave which, when the tide begins to flow, rushes up the narrowing estuaries of certain rivers, especially during spring tides. It is well seen in the R. Severn, Trent, Seine (*Mascaret*), Ganges, Yangtze Kiang, Amazon, and in the Bay of Fundy.

Borough. See **COUNTY BOROUGH**, **MUNICIPAL BOROUGH**.

Boulder Clay. See **GLACIER**.

Boundary, the actual line of division between countries, states, provinces, counties, etc. It passes through the **FRONTIER** between countries, and is usually drawn in thinly-populated areas—e.g. highlands (where it follows line of crests or water-parting), marshes, upper river courses—as is the boundary between England and Scotland. In new countries it frequently follows lines of latitude and longitude (e.g. Canada, Australia), and the actual position on the ground must be determined by survey.

Brave West Winds, regular strong W. and N.W. winds which blow all the year round in the 'Roaring Forties,' i.e. between 40° and 50° S. lat. They are of much assistance to sailing vessels.

Bread-fruit, the fruit of a tropical tree native to the Pacific Islands, and also cultivated in W. Indies and tropical America. The fruit is a fleshy mass about the size and shape of a pineapple. When roasted, or sliced, dried, and ground into flour, it forms the staple food of the South Sea islanders. Cloth is made from the inner bark of the tree, and canoes from its trunk.

Bret'ons, a Celtic people inhabiting Brittany (Fr. *Bretagne*), an anc. province occupying the great N.W. peninsula of France. The Bretons are noteworthy for their attachment to old ways and customs, their loyalty to Church and State, their piety, and the great wealth of their traditional folktales and folk-songs, probably the finest in the world.

Buddhism (*bood'ism*), one of the great religions of the world, having a larger number of followers than any other faith except Christianity (c. 325,000,000). Buddhism, which is largely a religion of self-denial, was founded in India by Prince Siddhartha or Gautama, later called the Buddha, in 6th century B.C., and is now, in various forms, chiefly the religion of China, Japan, Further India, Nepal, and Ceylon.

Buffer State, a country, usually independent, situated between two or more powerful states, and useful as helping to lessen the chance of war between them (e.g. Belgium, with neutrality guaranteed by Britain, France, and Germany; Afghanistan, between India and U.S.S.R., but under British influence).

Bunker Coal, the fuel required for ships' furnaces and carried in their 'bunkers.' Such coal is available at coaling stations, which may be near coalfields—e.g. Cardiff, Durban, Norfolk (U.S.A.); it is transported, especially from S. Wales, to stations remote from coalfields (e.g. Port Said, Falkland Is.). See **COALING STATIONS**.

Burgh. See **COUNTY BOROUGH**, **MUNICIPAL BOROUGH**, **ROYAL BURGH**.

Bush, the name given, particularly in Australia, to uncultivated dists. covered with a wild growth of shrubs and small trees. Along the desert margins are tracts of *salt-bush* and *blue-bush*, whose grey fleshy leaves supply food for sheep or for rabbits.

Bushmen, aborigines of s. Central Africa, especially of Kalahari Desert, rapidly approaching extinction. They are of moderate stature, with complexion of dirty yellow; the head is small and flat, the nose broad, and the forehead bulging. Savage, fearless, and nomadic in habits, they are great hunters and very swift-footed. Gifted with considerable intelligence, they are very reliable when civilized. Crude drawings and sculpture have been found in some of the caves which they formerly inhabited, giving evidence of some artistic ability.

Butte (*büt*), the name applied in western U.S.A. to any flat-topped hill rising steeply from the surrounding plain.

Cables, SUBMARINE, consist of twisted strands of copper wire enclosed in insulating and protecting materials. Such cables are laid on the ocean floor to transmit telegraphic messages. The first successful cables were laid from S. Foreland to N. France in 1851, from s.w. Ireland to Newfoundland in 1866, from Vancouver (Canada) to New Zealand and Australia in 1902; a cable from Durban crosses the Indian Ocean to the Cocos Islands, whence others are laid to Java and to Perth (W. Australia). The total length of the world's cables is c. 310,000 m.

Cacao (*ka-kä'ö*), or **COCOA** (*kö'kö*), the seeds (30-40 in number) found in the fleshy fruits or pods (7-10 in. long) which grow on the trunk and branches of the evergreen cacao tree, a native of the deep soils of hot, wet, sheltered lowlands near the equator in S. America; it has been planted with much success in W. Africa, and in Ceylon and Java. W. Africa now produces half the world's supply. The

seeds or beans are allowed to ferment before being dried in the sun. They are shipped whole or broken (cocoa nibs) from the Gold Coast, Brazil, Ecuador, São Thomé, Trinidad, etc. Cocoa is consumed as a beverage or prepared as eating chocolate in Holland, Switzerland, Germany, Great Britain, France, U.S.A. It was known in England in the 16th cent., before either tea or coffee. *Cocoa butter*, extracted from the beans, is used in making soap and pomade. Distinguish cocoa carefully from **COCOA-NUT** and **Coca**.

Camel, a large four-footed, cud-chewing animal used as a beast of burden in Asia, Africa, and Australia. The Arabian camel, or *dromedary*, with one hump, domesticated in Arabia and Egypt, is the speediest camel; it carries c. 400 lb. The *Bactrian camel*, with two humps, is a native of central Asia, named from Bactria, an anc. dist. between the R. Oxus and the Hindu-Kush Mts.; it is slow of movement, but can carry 700-1,000 lb. Camels are especially fitted to transport goods in dry lands (e.g. Sahara and Sudan), for they carry a reserve of water (lasting 3-13 days) in their stomachs, and eat coarse, prickly plants or absorb the fat of their humps; their eyes are protected against flying sand, and their broad-spreading feet do not sink into the sand.

Camphor (*kām'for*), a white substance with a strong, pungent smell, obtained mainly from the wood and leaves of a tree of the cinnamon family which grows in Japan, Formosa, central China, and the Malay Peninsula; also from the wood of a large tree in Borneo. It is used in medicine, as a disinfectant, and the wood is made into boxes which, like the commodity itself, preserve clothes from moths.

Cam'pos, the name for the level open plains of Argentina and z. Brazil.

Canal, an artificial waterway for draining land, for irrigation, and

particularly for inland navigation by boats and barges (barge canals), or by ocean-going ships (ship canals). Originally constructed on flat plains, canals can, by the use of locks or lifts, be carried by a series of level reaches over hilly ground, or can be carried through a hill by means of a tunnel. Ship canals convert inland towns into ports (e.g. Manchester), shorten sea passages (e.g. Suez and Panama Canals), avoid dangerous rapids on navigable rivers (e.g. Welland and St. Lawrence Canals, Canada). Stretches of shallow rivers are made navigable by being canalized (e.g. Thames, Seine).

Cañon (*can'yón*), or **CANYON**, a deep valley with very high and steep sides, cut out by a river running through a dry region. The most famous example is the Grand Canyon of R. Colorado, Arizona, U.S.A., which is c. 300 m. long, from 5 to 15 m. wide, and in places the river is 5,000 ft. below level of plateau.

Cardamom, a spice prepared from the seeds of the reed-like cardamom plant which grows 6-10 ft. high in s. India and Ceylon, where the spice is largely used. It is employed as a remedy for certain stomach troubles, and also for seasoning sauces.

Caribs, an American-Indian race found by Columbus in many islands of the West Indies; either exterminated or expelled thence, they are now few in number, and are chiefly found along the shores of the Caribbean Sea from the Isthmus of Darien to the mouth of R. Amazon.

Carob, or **LOCUST BEAN**, the long, flat, dried pod or fruit of the carob tree which grows in Mediterranean coast-lands, especially in Cyprus. It is rich in sugar, which is extracted for use in preserving fruits. It serves as food for animals or even as fruit for human beings; it is called St. John's bread because it was mistakenly supposed to have been the food eaten in the wilderness by John the Baptist.

Carse, the Scottish name for a

low-lying, fertile, alluvial plain drained by a river (e.g. Carse of Gowrie, Carse of Stirling).

Cassava, the starchy flour prepared from the underground stems of the manioc plant, a native of Brazil, now widely cultivated in the tropics. The root-like stems, c. 3 ft. long, are poisonous before the milky juice is removed. When dried and ground the flour is used for bread-making, or washed and dried to form *tapioca*, which is exported from W. and E. Indies.

Chart, a map of a portion of the sea showing coast outlines and prominent landmarks, rocks, shallows, depths of the sea (marked in fathoms or in feet). It enables a sailor to navigate seas and oceans, to lay his course from one place to another, to find his exact position, and to know what dangers to avoid.

Chicle (*chik'l*), the solidified milky juice (a form of rubber) of a tree of Mexico and Central America, especially Honduras. It forms the basis of chewing-gum. Nearly 12,000,000 lb. are annually imported by the U.S.A.

China-clay, or **KAOLIN**, a fine, white, greasy clay used in making porcelain. It results from the weathering of granite, when the felspar breaks up into a powder which, when wet, forms the clay. It is found in Cornwall, central France, Saxony, China, Japan, and U.S.A. The china-clay of Cornwall is transported to central England to be made into Wedgwood, Worcester, Derby, and other ware; that of Limoges is used in making Sèvres ware; that of Saxony for Dresden china.

Chinook, a dry wind, warm in winter and cool in summer, which descends the eastern slopes of the Rocky Mts., Canada. In spring and winter it rapidly removes snow from the western prairies, exposing grass for cattle ranching, and in autumn it makes natural hay of the grass. It also occurs in Montana and Wyoming, U.S.A.

Cinchona (*sin-kō'nā*), the name of c. 40 varieties of a tropical evergreen tree, native of the hot, wet E. slopes of the Andes between 7° N. and 22° S. lat., at alt. of 5,000-10,000 ft. The tree has been successfully transplanted in Himalayas, Nilgiri Hills, Sumatra, and Java. It is the source of Peruvian bark, from which is extracted *quinine*, used since 1638 as a remedy for malarial fevers and as a tonic. Java is the principal source of supply.

Cinnamon, the inner bark (ground or unground) of the branches and twigs of a tree native to favoured parts of Ceylon, which yields the bulk of the world's supply. The tree has been introduced into E. and W. Indies and S. America. It is used as a spice. Oil of cinnamon is used medicinally and in the preparation of liquors and perfumes.

Cirque (*sirk*), a semicircular depression hollowed out by ice action at the head of a valley in a mountain region. It has steep, high sides, and often contains a lake. The Scottish name is corrie. Examples: Cirque de Gavarnie (Pyrenees), Devil's Beef Tub (Dumfriesshire).

Citronella Oil, an oil prepared from a fragrant grass grown extensively in Ceylon. It is used in India as a cure for rheumatism, in Europe and America in making soap and scent, and as a preventive against insect bites.

Citrus Fruits, pulpy fruits, with a tough skin or peel, produced by varieties of evergreen citrus tree, which is a native of tropical Asia and thrives only in subtropical and Mediterranean climates. The principal fruits are the orange, lemon, tangerine, lime, kumquat, and grape-fruit, of which the first three grow most abundantly in Spain, Sicily, Algeria, W. Indies, Brazil, Paraguay, U.S.A., and S. Africa; the finest oranges are Maltese, Jaffa, St. Michael (Azores), and W. Indian. The lime is grown chiefly in Montserrat, the kumquat in Japan, and the grape-fruit in California, Florida, and W. Indies.

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Climate, the average of weather conditions over a long period of years in any part of the world. The chief factors in climate are TEMPERATURE, RAINFALL, and WIND, and these depend mainly upon latitude, distance from the sea, relief, soil, and vegetation. As regards temperature, the world has been divided into the following belts: *Torrid*, between 23½° N. and 23½° S.; *N. and S. Temperate*, between 23½° N. and 66½° N., and between 23½° S. and 66½° S.; and *Frigid*, between 66½° N. and S. and the Poles. These divisions, however, give a very inadequate idea of the various climates of the earth, as they depend solely on latitude. A glance at a temperature map shows that ISOTHERMS do not coincide with lines of latitude. A more satisfactory classification of climate zones, which takes into account all the factors of climate, divides the earth into eight main belts, viz.: the *Tropical Rain Zone*; two *Dry Zones*, steppe and desert; two *Warm Temperate Zones*, including Mediterranean and monsoon areas; *Snow and Forest Zone*, with hot summers and cold winters, only found in N. hemisphere; two *Polar Caps*.

Types of climate may be classified as follows: *Marine or Oceanic*, in which, owing to the influence of the adjacent sea, the climate is equable, damp, and cloudy, weather is changeable, but seasonal changes are not great (e.g. British Isles); *Continental*, in which owing to distance from the sea's influence temperatures are high in summer and low in winter, the air is dry and clear, rainfall diminishes with distance from the sea, and weather changes are not abrupt (e.g. Siberia); *Desert*, an extreme form of continental climate in which are warm days often with high winds, and relatively cool and calm nights, rainfall being scanty or irregular (e.g. the Sahara); *Subtropical*, found at the tropical margins of temperate zones, and characterized by mild, rainy winters and hot, dry summers; best seen on the W. coasts and islands of

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continents in the warm temperate zones (e.g. Sicily); further inland there may be a tendency to spring and autumn rains (e.g. southern U.S.A.); *Monsoon*, depending largely on seasonal winds with summer rainfall (e.g. India); *Coast* or *Littoral*, in which owing to the influence of ocean currents and prevailing winds the climate is between marine and continental (e.g. Oregon, U.S.A.); *Mountain* or *Plateau*, where, owing to the influence of altitude, there are low temperatures, high winds, and dry, pure air (e.g. Tibet).

Climate plays a very important part in determining the distribution of plants, animals, and people over the earth's surface.

Cloud, a mist high above the level of the ground. It is formed by the condensation of the water vapour in the air into minute particles of water, the cores of which are specks of dust. These particles are sometimes frozen into minute crystals of ice and snow. The chief cloud forms are: (a) *Cirrus* ('a hair'), white and feathery, and composed of ice crystals; average height, 30,000 ft. (b) *Nimbus* ('rain cloud'), a thick, dark layer of cloud with ragged edges, from which rain is falling; average height, 6,500 ft. (c) *Cumulus* ('wool pack'), thick, woolly, with horizontal base and rounded domes at upper side; average height, 4,500 to 6,000 ft. (d) *Stratus* ('sheet'), a horizontal sheet of lifted mist; average height, under 3,300 ft. There are many intermediate forms, such as *cirrostratus*, *cirrocumulus*, *stratocumulus*, etc.

Cloves, the dried flower-buds of an equatorial tree belonging to the Spice Islands, and for long almost confined to Amboina, but now grown also in Zanzibar and Pemba, tropical America, and W. Indies. Zanzibar, the main source of supply, is being challenged by Java and Sumatra. Cloves are used as a spice because of their strong, fragrant odour and hot, sharp taste. Oil of cloves is extracted

for use not only in cooking and the making of liqueurs, but also as a local anæsthetic by dentists and a cure for toothache by their patients.

Coaling Stations, or **FUELLING STATIONS**, ports conveniently situated and equipped for storing and supplying fuel (coal or oil) to merchant or naval steamers. They are necessary because vessels cannot carry in their bunkers sufficient fuel for long voyages, or require the space for cargo. They include most large seaports of the British Empire, and are least numerous on the American Pacific coast, where there is none between San Francisco and Concepcion Bay (Chile). Important mid-ocean coaling stations are Honolulu, Samoa, Fiji, and Mauritius. See **BUNKER COAL**, **ENTREPÔT**, **TRADE ROUTES**.

Coast, the strip of land touching or adjoining the sea. The nature of the coast varies according to the kind of land bordering the sea, and may be: (a) *irregular*, with numerous bays, fiords, headlands, fringing islands, etc. (e.g. w. coast of Scotland); (b) *regular*, with few openings (e.g. s. coast of Australia).

Coast Erosion. See **EROSION**.

Coasting Trade, the trade carried on in small vessels from port to port round the coasts of a country, including the distribution of large cargoes brought to the great ports by ocean traders.

Co'ca, the dried leaves of the coca shrub, a native of the e. slopes of the tropical Andes, now also extensively cultivated in Java. The leaves are chewed by S. American Indians to prevent fatigue and hunger. *Cocaine*, used as a local anæsthetic, is extracted from coca leaves.

Cocoa. See **CACAO**.

Coconut, the fruit of the coconut palm (60-80 ft. high), which thrives best on the sandy shores of tropical lands. From the fibrous husk *coir* is obtained. Inside the hard shell is a fleshy kernel which forms *copra* when dried in the sun, and *desiccated coconut* (much used in confectionery) when

dried by artificial heat. *Coconut oil* is obtained both from the fresh kernel and from copra. The largest exporters of copra are the Dutch E. Indies, Philippine Islands, and Ceylon, while coconut oil is most largely exported from the Philippines. The chief importers of both are the U.S.A., followed by Germany and Holland. The timber of the palm is used in building; the leaves serve for thatching or basket-making; the fermented juice of the flower forms the drink called *arrack*. A large variety of coconut, weighing 40-50 lb. and containing usually four fruits, is a native of the Seychelles; it is known as *coco de mer* or *double coconut*. See *Coir*, *COFRA*.

Coffee, the seeds or beans, usually two in number, enclosed in the pulpy berries ('cherries') of a tropical shrub which grows in the rich soils of well-watered slopes at alt. of 600-6,000 ft., but generally c. 2,000 ft. The beans are dried in the sun, separated from their covering coats, and exported in bags of c. 130 lb. The largest exporter is Brazil (cheap qualities); the best coffees come from Guatemala, Costa Rica, s. India (Mysore, Coorg), and Kenya; other sources are E. and W. Indies, W. Africa, and Arabia ('Mocha'). Coffee was introduced into England in 1652; the consumption per head is largest in U.S.A., Sweden, Denmark, and Holland.

Coir, the thick fibre forming the husk of the coconut. It is exported from Ceylon, India, and tropical islands, and is made into ropes, brushes, door-mats, stair-carpetts, etc.

Col ('neck'), a narrow depression or pass in a mountain range allowing fairly easy passage from one valley to another. It is usually formed by the headwaters of streams wearing away the water parting from opposite sides.

Condensation, the change or process by which invisible water vapour in the atmosphere is converted into liquid or solid form, such as dew, mist, rain, snow, hail. Condensation is

brought about by cooling. Water vapour will not condense unless dust particles are present in the air.

Continent, the name given to a large continuous mass of land on the earth's surface. The adjacent islands are reckoned as part of the continent. There are six continents, viz: Eurasia (Europe and Asia), Africa, N. America, S. America, Australia, Antarctica. In the British Isles 'the Continent' means the mainland of Europe.

Continent'al Shelf, LEDGE, or PLAT-FORM. The continents are fringed by a belt of shallow water where the sea bottom slopes gently from the shore line to a depth of c. 600 ft.; this is known as the Continental Shelf. Beyond this the slope is very much steeper. The shallow seas covering continental shelves are the richest fishing grounds in the world (e.g. Newfoundland Banks, North Sea).

Contour Lines (*kon'toor*), lines drawn on a map through points at the same height above sea-level. Such lines are drawn at fixed intervals, which vary according to the scale of the map. Where slopes are steep the lines lie close together, and where they are far apart it indicates that the slopes are very gentle.

Coolies, unskilled labourers, especially from India and China, usually employed in tropical countries other than their own, in various parts of the world. The need for such labour arose on the abolition of slavery, when it became impossible to secure an adequate supply of such workers locally. Coolies usually agree to serve for a certain number of years at a fixed rate of pay, and then return to their own country, their passage being paid both ways. Their employment has caused much trouble among the working-classes in certain countries, particularly America and Australia, owing to their being willing to work for very low wages.

Coomb, Combe, Cwm (*koom*), a short, steep-sided valley on the flank of a hill or running inland from an elevated

coast. The term is used in parts of s.w. England and Wales.

Co'pal, a hard, clear resin obtained from many tropical trees, the best quality from E. Africa (Zanzibar). It is used in making varnishes and lacquers.

Cop'ra, the dried kernel of the coconut, exported from the Pacific Islands, etc. The oil extracted is used in margarine factories especially at Hamburg and Marseilles.

Cor'al, a kind of rock formed from the hard, limy skeletons or frameworks of minute marine animals called coral *polyps*. Multitudes of these tiny creatures, chiefly *madrepores* and *nullipores*, attach themselves to under-water rocks and peaks, and, by the secretion of carbonate of lime from the sea, generations of polyps gradually build up the rocks till they reach the surface in the form of reefs or islands. This active building is carried on in the tropical seas between 30° N. and S. of the equator. There are three kinds of coral reef. If the reef is close to or attached to an island or part of the mainland it is called a *Fringing Reef* (common in E. Indies). If it runs roughly parallel to the mainland, from which it is separated by a navigable channel of considerable width, it is called a *Barrier Reef* (Great Barrier Reef, Australia, 1,200 m. long). The reef may take the form of an *Atoll*, an irregular ring-shaped island surrounding a central lagoon (many in Laccadive and Maldivé Islands). Coral rock may be of many colours (green, red, blue, pink, yellow), which combine to give the reefs their beautiful tints. Coral polyps can only live in the warmer parts of the ocean, and in clear, very salt water, and they find most food and grow fastest on the seaward sides of reefs and atolls. They cannot live at a greater depth than 150 ft. The chief coral formations are found in the Gulf of Mexico and the w. coast of Florida, the western Indian Ocean, and particularly the western Pacific Ocean. The red or precious coral found in the shallow

parts of the Mediterranean Sea along the coasts of Tunisia, Algeria, and Morocco and other parts, is much used for making jewellery and ornaments.

Cordillera (*cor-dil-yá-ra*), a Spanish name for a ridge or chain of mountains. It is now applied to any series of parallel ranges of mountains, such as the Andes in S. America and the Rocky Mountains in N. America.

Corrie. See **CIRQUE**.

Cot'ton, the fine hairs on the seeds of the cotton shrub. The shrubs are usually planted each year, but in some countries are left for a second year (ratoon cotton). They are cultivated in tropical, and especially in sub-tropical, climates, and require c. 200 days free from frost. They are subject to insect pests (e.g. boll-weevil in America). In India and China much of the cotton, and in Egypt the whole crop, is grown on irrigated fields. The seeds, which are like slightly flattened peas, are contained in a fruit or boll about the size of a small apple. The ripe bolls are hand-picked, and the fibres separated by a machine (the saw-gin). The quality is judged by the length (staple) of the fibres; long-stapled cotton has fibres of 1½ in. or more; the long-staples are W. Indian, Sea-Island, and Egyptian cottons; American uplands have a staple of 1½ in.; Indian, Russian, and Chinese cottons are short-stapled (¾-1 in.). The ginned cotton fibre is pressed into bales of c. 500 lb. for export. The principal producing lands, with production in millions of bales, are U.S.A. (Texas, Mississippi, Arkansas, Oklahoma, Alabama, Georgia) (15), India (5), China (1½), Egypt (1½), U.S.S.R. (1½), British Empire (excluding India) (½), world (30). Great Britain, U.S.A., Germany, France, India, Japan, and Italy are the chief cotton-manufacturing countries. Cotton seeds yield an oil used as salad oil, etc.; the refuse is made into cattle cake or used as manure on cotton fields.

Coun'ty Bor' ough, name applied since the passing of the Local Government

Act, 1888, to all English towns having a population of 50,000 and upwards. Previously these had been under the control of the county council of the county in which they were situated, but were then given full and entire control of their own local affairs. These boroughs number about a hundred, and include all the larger English towns. In their number are those towns which were counties of themselves before the Act of 1888, and which should, more properly, be called *counties of towns* or of *cities*. These were towns so important in old days that separate sheriffs were appointed to manage their affairs, as was done in the case of the counties themselves. London, Nottingham, Bristol, Gloucester are examples of such cities.

Crater. See VOLCANO.

Crevasse (*kre-vas*'), a deep crack or fissure in the ice of a glacier. It may run across or along the glacier, and is caused by the strain produced by unequal rates of movement or by the movement of the ice over an uneven surface. The term is sometimes applied to the cracks appearing in the LEVES of the lower Mississippi.

Our'ants. (1) Dried small seedless grapes, grown in Mediterranean climate of Greece, especially round the Gulf of Corinth, and exported from Corinth, from which the name (Corinths) is derived; now also prepared for export in E. Australia. (2) Small round fruits, resembling the above in size, grown on bushes in temperate climates, and named by colour—black, red, and white. They are made into jams and jellies.

Currents, OCEAN. See OCEAN CURRENTS.

Cyclone (*si-klōn*), or **Low** or **DEPRESSION**, area of low air pressure in which the ISOBARS indicate a steady decrease of pressure towards the centre. The isobars form a series of oval rings, generally close together at the broad end, near which the centre lies, but farther apart at the narrow end, which is the 'front' of the

system. Air moves spirally inwards to the centre, over which it tends to ascend; the movement of such air or wind is anticlockwise in the N., clockwise in the S. hemisphere, and is strongest where the isobars are closest, i.e. where the gradient is steepest. Cyclones tend to move rapidly, and are accompanied by cloudy skies, strong and stormy winds, and heavy rains. See also WHIRLWIND.

Dam, an embankment or wall of earth or masonry built across a river valley to form a lake or reservoir. The water thus kept back may be used to supply towns (e.g. Talla Reservoir and Edinburgh, or Lake Vyrnwy and Liverpool), or to irrigate a stretch of land over which the amount of rainfall is uncertain, or insufficient for agriculture (e.g. Sennar Dam at Makwar on R. Blue Nile stores water for the irrigation of the plain of Gezira).

Date Line, or INTERNATIONAL DATE LINE, a 'time' line agreed upon at which the 'day' begins. It follows roughly the 180th meridian of longitude. The necessity for such a line arises thus. Two ship captains start from London to sail round the world, one called A. sailing eastward, and the other, called B., sailing westward. They meet at the 180th meridian, and on comparing notes find that A.'s watch is 12 hours fast as compared with Greenwich time, while B.'s watch is 12 hours slow. Moreover, A. declares that the date is, say, Tuesday, 15th March, while B. is sure that the date is Monday, 14th March. A whole day, or 24 hours, is thus 'lost' or 'gained' according as one completes an eastward or westward voyage round the world from London. To avoid this confusion due to difference of dates the 180th meridian was chosen as the longitude where sailors could change the day, backward if sailing eastward, forward if going westward. The date line is not straight, but is drawn in such a way that islands of

any one group may be on the same side of the line. American possessions near the 180th meridian take the same dates as America, and certain Pacific islands take Australian dates. See **TIME**.

Dates, the fruits of the date-palm which thrives in the oases of hot deserts from N. Africa to India, and is cultivated under irrigation in Iraq. They form an important article of food in these lands, and are also exported. The finest qualities come from Algeria, Tunis, and Morocco, and large quantities reach European markets from Basra (Bussorah dates). In India sugar is extracted from dates.

Del'ta, a fan-shaped tract of coastal land composed of the fine silt brought down by a muddy river and deposited when the current of the river is checked by the sea or a lake. This at first forms a shoal or bar, and later an island dividing the river into two branches, and a similar process takes place at the mouths of these and other branches. It is bounded by the farthest apart branches or distributaries into which the river divides, and is traversed by numerous other branch streams. When tidal currents are very weak the delta grows seaward, thus adding new land to the local coast (e.g. deltas of Rs. Mississippi and Po). In a lake the delta sometimes grows as far as the opposite shore, and the lake is divided into two parts (e.g. Lake Thun, Switzerland). Deltas are usually very fertile and are thickly populated. The name of this formation was first given to the delta of the Nile, the triangular shape of which resembled the Greek letter delta (Δ).

Dénudá'tion, the breaking up and carrying away of particles and fragments of rock and soil by running water, wind, etc. The chief agents in this work are wind, rain, running water, frost, glaciers, and the sea, and there are usually several of these agents acting together. In some dry regions wind hurls sand and grit against rock faces, which are thus

worn away. Rain dissolves mineral matter in rocks, thus breaking up the solid texture of the rock and the smaller particles are washed away. Running water carves out valleys, gullies, ravines, etc., and also carries away the finer material to form plains, deltas, etc. Frost does much destructive work, particularly at high altitudes and in cold countries, by shattering or cracking rocks, and this greatly assists other denuding agents. Glaciers, in addition to carrying away large quantities of boulders, grind the underlying rock surface into fine soil, which is finally carried off by water. The sea pounds rocks into gravel and sand, both of which may be removed by currents and deposited at some distance. The rate of denudation varies according to the nature of the surface, the slope of the ground, and the climate.

Depression. See **CYCLONE**.

Des'ert, a barren tract of land with little vegetation and few, if any, inhabitants. Deserts are the result of very high temperatures along with very scanty rainfall, or of very low temperatures. In hot deserts (e.g. the Sahara) occasional areas of fertile land surrounding a spring of water are found (**OASES**), but in cold deserts (e.g. the **TUNDRA** of N. Siberia) only coarse mosses grow during the brief summer. In both types of desert animal life is scarce.

Dink'as, Negro tribes occupying districts on either side of the Bahr-el-Abiad or White Nile in the southern part of the Sudan. In appearance they are tall and very black, and in character brave and warlike.

Dol'drums, the belt of calms and light variable winds between the N.E. and S.E. Trade Winds. The belt is found over the ocean at or near the equator, and changes its position according as the sun 'moves' N. or S. to the Tropics of Cancer and Capricorn. The air is hot and steamy, rainfall is very heavy and frequent, severe thunderstorms occur, and winds are squally.

Drainage. See RIVERS.

Drift. See OCEAN CURRENTS.

Dry Farming, a system of cultivation of lands with scanty rainfall, otherwise too dry for agriculture. The land is deeply ploughed and the surface soil is kept loose, and thus forms a 'blanket' or 'mulch' which prevents the moisture from the damp earth underneath rising by capillary attraction and being evaporated. The subsoil is made compact to increase its water-holding capacity. Seeds (e.g. of wheat) are sown deep by drill plough. This system of farming is practised in dry regions where irrigation is not practicable, in Europe, India, w. U.S.A., w. Canada, Australia, and S. Africa.

Dunes, mounds or ridges of drifting sand heaped up and shaped by the wind. Dunes are formed where some small obstacle checks the speed of the wind, and allows some of the rolling or drifting sand grains to come to rest on the windward side of the obstruction. In this way dunes or sand hills are soon formed, which usually show a long slope on the wind side, and a shorter, steeper slope on the lee side. The dunes tend to advance in the direction of the prevailing wind, unless the sand is fixed by planting suitable vegetation. They are numerous along sandy seashores with prevailing onshore winds (e.g. Landes of France, Bay of Biscay), and in the low-lying areas of hot deserts (e.g. the Sahara). When they move forward much destruction results, whole forests, farms, and villages being buried. Sand dunes on the N. African coast are 600 ft. above the general ground level.

Durra (*doo'ra*), the African name for the great millet of India; also known as Guinea corn. See MILLET.

Dy'aks, or DAYAKS, aboriginal inhabitants of Borneo. They are akin to the Malays, being reddish-brown in colour, but are taller in stature, and more honest and trustworthy in character. They were long notorious for head-hunting, but that practice is

now almost given up. Their weapons are the blowpipe, the sword, and the spear. Of considerable intelligence, they practise spinning, weaving, and other crafts.

Dyke (*dik*), (a) in Scotland, a boundary wall of turf or stone; (b) name used in East Anglia for a natural or artificial trench filled with water; (c) an embankment to keep a river or the sea from overflowing the land (e.g. Lower R. Mississippi (LEVEES), and Holland); (d) a more or less vertical wall of volcanic rock filling a crack or fissure in the earth's crust. Such dykes sometimes show above the surface as the result of denudation, but most of them are under the surface; some are many yards broad, but more commonly they are only a few feet. See VOLCANO.

Eagre (*d'ger* or *z'ger*). See BORE.

Earth Pillar, a tapering column of earth on the top of which a large boulder is frequently perched. Such columns may be from 30 to 100 ft. in height, and are produced by the action of rain on the surrounding soft, stony clay, while the pillar itself is protected from erosion by the boulder or other hard material. They are common in regions where glacial moraines and boulder clay are found (e.g. the Tirol, Alps).

Earthquake, a more or less violent shaking of the earth's crust, due to the fracture and movement of rocks below the surface. The point of origin is believed never to exceed 33 m. in depth. From that point the disturbance travels in wavelike motion and in all directions to the surface, decreasing in intensity as it proceeds. The shocks may be so gentle at the surface as not to be noticeable, or they may be so violent as to cause much destruction and loss of life and buildings. Landslips may occur, crevasses or cracks in the land surface may appear, and the whole drainage system of an area may be altered. When shocks originate under the sea near the shores of continents or islands great sea waves are

produced which cause much damage. All shocks are preceded by slight tremblings, which are followed by more or less severe vibration which gradually dies away. In most cases the shocks last only a few seconds, but the tremblings may continue for days or weeks. Italy, Japan, China, and Peru are subject to frequent and destructive earthquakes. The earthquakes at Lisbon (1755), Messina (1908), and Tokyo, Japan (1923), are among the worst of which there are records. The study of earthquakes is called *Seismology*, and the recording and measuring instrument is a *Seismometer*.

Eclipse (*eh-lips'*), the obscuring or darkening of a heavenly body by another, or by its shadow. An eclipse of the sun is caused by the moon passing between it and the earth; the moon is eclipsed when it passes through the earth's shadow. An eclipse is *total* when the whole face of the sun or moon is hidden, and *partial* when only a portion of the face is in darkness. When the moon leaves the outer rim of the sun exposed, the eclipse is *annular*. Stars and planets also suffer eclipse.

Entrepôt (*on'tr-pô*), a commercial centre, either seaport or inland town, at which goods are collected to be distributed over a large area or to be exported in bulk (e.g. Singapore). Many entrepôts are also important coaling stations. *Entrepôt Trade* is the collection at entrepôts of commodities from many different parts of the world for distribution to many other parts, and is naturally centred at seaports (e.g. London, Hong Kong). See **TRADE ROUTES**.

Equator. See **LATITUDE**.

Equinox, the time of the year when day and night are equal. This occurs twice each year all over the globe, when the sun is vertical over the equator on or about March 21 (the *Vernal* (Spring) Equinox), and again about September 22 (the *Autumnal* Equinox).

Erosion, the gradual removal or

wearing away of portions of the earth's surface by natural agencies. Rain, ice, wind, etc., continually carry on this work, and the small fragments and finely broken material are removed by running water. The erosion of coast cliffs is mainly the work of sea waves dashing stones, rock fragments, and sand against the lower portions of the cliffs, causing them to be undermined; frost, rain, and the roots of vegetation attack the upper portions, and the masses of rock which are loosened and fall to the base are instruments of further erosion. The harder portions of the cliffs remain as capes and peninsulas. Rivers erode their channels and banks, especially in times of flood, and where the current is swift an enormous amount of erosion takes place in mountain chains.

Escarpment, a ridge of land or rock with a steep, abrupt slope on one side, the other slope being much more gentle. The escarpment is the outcrop of a tilted stratum of hard rock, the steep part being the face of the stratum and the gentle slope representing its surface.

Es'kimos, or **ESQUIMAUX**, aboriginal inhabitants of Greenland and the Arctic regions of N. America. They number c. 30,000, and, as they are very widely scattered, the number at any particular place is comparatively small, only some 20 or 30 families in a group. They are of short stature, have broad, fat faces and coarse black hair, bearing very close resemblance to the N. American Indians. They live by fishing, and hunting seals and whales, but the commercial hunting of these animals by traders has reduced their natural food supplies, and in Alaska, for example, reindeer have been introduced in order to provide better food supplies. In summer they live in tents near open water; in winter in huts of turf and snow, heated by oil-lamps. They are an extremely healthy and contented race, and are very conservative in habits, showing little inclination to adopt civilized ways of life. In 1912 the explorer

Stefannson discovered near Coronation Gulf, on the arctic shores of N. America, a community of white Eskimos with red hair and blue eyes who were probably descended from the old Norse Vikings who visited America from c. 1000 onwards.

Esparto. See ALFA.

Estuary, the part of a river mouth up which the tide flows. In the estuary of a river like the Thames the water becomes rapidly saltier from the river to the sea, and the lower layers are much saltier than the surface. If the river mouth is very large and wide, with no obstruction or bar (e.g. Firth of Forth), the saltness of the water is uniform in the seaward half, only the upper and narrower portion being really estuarine.

Eucalyptus (*û-ha-lip'tûs*), a family of plants, allied to the myrtles, native to Australia, where the trees are called 'gum-trees.' The species, numbering over 350, vary in size from forest trees to low-growing, stunted MALLEES, c. 15 ft. high, which form the scrub country of N.W. Victoria. The trees are classed as ironbarks (with a corrugated bark), stringy-barks (with a fibrous bark), and gums (with smooth bark); the gums are distinguished by the colour of their bark as blue gums, red gums, spotted gums, etc. Eucalypt timber is a strong and durable hardwood, generally red or brown in colour; the best-known woods are those of s. Swanland, W. Australia—*Jarnah* (used for street paving, railway sleepers, and piles for piers), *Karri* (for bridge building), *Tuart* (for framing), *Wandoo* and *York Gum* (for pit props). The *Tallow-wood* of New S. Wales is used for flooring, and the *Mountain Ash* of Victoria, which splits readily, is largely employed in making fences. *Eucalyptus oil*, extracted from the leaves, is used in making soap and disinfectants.

Evaporation, the process by which a solid or liquid is converted into an invisible vapour or gas. The conversion of ice and water into water vapour goes on constantly, not only

over the sea but wherever there is moisture in the soil, except where the air is already saturated, or contains all the water vapour it can hold. As the capacity for holding water vapour is greater in warm air than in cold, it is in the warmer areas that evaporation is most extensive and rapid. Conditions favouring evaporation are *warm* and *dry* air which is not saturated; *wind*, which carries away the wet air, replacing it with drier air; and a *large water surface* over which there is high temperature.

Fall Line, the American name for the irregular line marking the junction of the Appalachian Mts. and the e. coastal plain. The rivers form waterfalls and rapids as they pass from the high ground to the plain. On their banks below the falls many important manufacturing cities have arisen (e.g. Philadelphia, Trenton) in which numerous industries are carried on by the help of water-power. A similar line is seen where the Italian Alps meet the Plain of Lombardy.

Fauna (*fau'na*), the native animals of any particular geographical region or any epoch of time.

Fertilizers, substances used to make soil more productive or to enable plants to withstand adverse conditions and thrive in spite of them. The following are the chief fertilizers: farmyard manure, guano or the droppings of sea-birds obtained from islands off Peru, S. Africa, etc., lime, limestone and chalk, nitrates, phosphates, and potassium salts. Nitrates are obtained from Chile, Norway, and Germany; phosphates from raw material obtained in N. Africa; and potassium salts from Stassfurt in Germany.

Fjord. See FJORD.

Firn. See GLACIER.

Fjord (*fj'ord*), a long, narrow arm of the sea between steep, high cliffs. Fjords are usually shallow at the mouth, with deep water inland. They are numerous on the w. coasts of Norway, Scotland, British Columbia, Chile, and s. New Zealand. Sogne

Fjord, Norway, is over 100 m. long and 4,000 ft. deep. In Scotland such openings are known as *Firths* or (sea) lochs.

Flax, or **LIN**, an annual plant with a tall, upright stem (c. 2 ft.), small leaves, and blue flowers. It grows through a wide range of climate, but is cultivated only on suitable soils where labour is abundant. It is grown either for its fibre or for its seeds. The fibre of the inner bark of the stem forms the flax of commerce, and is spun and woven into *linen*, a word derived from *Linum*, the Latin name of the plant. Russia exports large quantities of flax, but the best quality comes from the valley of the R. Lys in Belgium; some is produced in N. Ireland. The plants are pulled by the roots by hand labour, *rippled* by machines to remove the seeds, *retted* (rotted) in water or dew, dried in the open air, rolled by machines which break the wood of the stems, and *scutched* to separate the wood from the fibre, which is then *heckled* (combed); the short fibres form *tow*. The linen industry, which dates as far back as history and is widely carried on, is specially important in N. Ireland, W. Fife and S. Angus (Scotland), Westphalia, Bohemia, and Belgium. In Argentina, India, U.S.A., Canada, and Russia much flax is grown for its seed (linseed), which yields an oil used in making paints, varnishes, and printer's ink, while the crushed seeds are prepared as *oilcake* for feeding cattle. *New Zealand Flax* (*Phormium*) is the very strong fibre of a plant of a quite different species grown in New Zealand; it is made into ropes, mats, sailcloth, etc.

Flo'ra, plants native to any particular geographical region, or belonging to a particular period of time.

Föhn, a warm, dry wind which blows down the northern valleys of the Alps in winter and spring. It blows from the south; its moisture is deposited on the S. side of the mountains, and warm dry weather is experienced on the N. side. A similar

wind blows over the Rocky Mts. from the W., and is known in Canada as the **CHINOOK**.

Forest, an area of land well stocked with trees, either of natural growth or planted by man. Such areas are found only where the rainfall and temperature are suitable. There are three main types of forests according to the nature of the wood produced—(1) *coniferous* or *softwood* forests, consisting chiefly of pines, spruces, firs, larches, etc., and found in the northern hemisphere, chiefly in Canada, U.S.A., Norway, Sweden, Finland, Russia, and Manchuria; (2) *temperate hardwood* forests, consisting chiefly of oaks, maples, birches, poplars, etc., and found in the northern hemisphere in the parts lying immediately S. of the coniferous areas mentioned above; (3) *tropical hardwood* forests, consisting chiefly of mahogany, logwood, rosewood, ebony, etc., found in their greatest extent in the tropical regions of America, Africa, and Asia. The first two kinds of forests are those most generally useful to man, and they are found chiefly in the north temperate zone, where the population is most dense, and the need therefore greatest. Tropical forests are not so useful because many of the trees do not provide suitable timber, but more because of the lack of easy transport and the difficulty of securing a sufficient supply of workers. Besides providing man with timber, forests are useful and important in other ways—they affect climate and direction of rivers, protect the soil from erosion, and sometimes act as barriers to the colonization and development of a country. At certain periods and in certain places the forest areas have been too ruthlessly cleared, and it has accordingly become necessary to replant areas of this kind and to protect existing areas against the ravages of man or of nature. See **AFFORESTATION**.

Fox Farming. See **FURS**.

Free Port, a port, or area within a port, exacting no customs duties on

imports or exports from any vessel discharging or loading cargo. Such duties are payable only when goods are carried from the free zone into the HINDERLAND. A free port is usually an ENTREPÔT, e.g. Copenhagen serves the Baltic lands. By the establishment of bonded warehouses, in which taxable commodities may be stored duty-free till they are required for consumption, the privileges of free ports have become less valuable. Of European free ports Hamburg, Danzig, and Copenhagen are the most important; in the British Empire the largest free ports are Hong Kong, Singapore, and Penang.

Frontier, the area of separation (generally thinly populated) between two densely peopled areas whose inhabitants form distinct political groups (e.g. English Channel between England and France, Alps between France and Italy); it is known also as the *Marches* or *Borders*. Through it the *boundary* is drawn. It serves as a protection against surprise attacks by either people, and is usually fortified where routes cross it (e.g. Belfort, France). On the frontier are Customs stations to prevent smuggling, and medical centres to keep out people infected with diseases. The best frontiers are seas, deserts, mountains, forests, and swamps. The term is also applied to the area where one group of races, languages, climates, plants, or animals passes into another such group. See **BOUNDARY**.

Frost, a general name for the conditions when the temperature falls to 32° F., which is the freezing point of water, or to a lower degree. Frost is one of the active agents of denudation. Water enters the pores and cracks of apparently solid rocks. On freezing, this water expands and helps to break up or disintegrate the rocks. If not of too long duration, frost is of service to the farmer in temperate lands, as it breaks up the surface soil and makes the land easy to work in spring. Spring frosts may do damage to growing vegetation in May or June, and in

some places autumn frosts are very injurious to ripening grain. *Hoar-frost* is the visible frozen vapour found on exposed surfaces.

Fulahs, or **FULANI**, a race of people distributed across Africa from the Upper Nile to Senegal. A white race, strong and well-built, with Caucasian features, they are frank and intelligent, trustworthy, and devout Mohammedans. They are industrious, practising agriculture, carrying on trade, working iron and silver, and weaving various fabrics. At the beginning of the nineteenth century they conquered their neighbours and founded great kingdoms in Nigeria, which still remain under British suzerainty.

Furs, the skins of certain animals, covered with fine, short, soft hair, through which long protective hairs (over-hair or guard-hair) protrude. Fur is used as clothing, especially in colder climates. Furs are mainly collected by trappers in temperate and arctic N. America and Eurasia, where the weasel family (stoat or ermine, marten, sable, mink, and skunk), and beavers, raccoons, foxes, musk-rats or musquashes, etc., are numerous. To these may be added Australasian rabbits, opossums, and wallabies; S. American chinchilla rats and coypus (nutria furs); and certain tropical animals. Furs are collected (e.g. by the Hudson's Bay Co.) for sale at the great auctions held in London, Leipzig, and New York. To maintain supplies some governments have established experimental farms where fur-bearing animals, especially foxes and rabbits, are bred in captivity (e.g. in New York state and California, U.S.A., Prince Edward I., Canada); and similar farms have been established (*fox farming*) as private enterprises in America, Europe, and even in Britain. To prevent extermination the fur seal and sea-otter are protected by U.S.A. and Canada.

Gap. See **PASS**.

Gauge, **RAILWAY**, the distance be-

tween the inner edges of the rails. The *standard gauge* (4 ft. 8½ in.) is that of British lines, which were the first to be laid down, and conformed to the earlier wooden wagon ways. This gauge was generally adopted on the continent of Europe, in Egypt, in N. America, and for the transcontinental line from Port Augusta to Kalgoorlie in Australia. *Broad gauges* are used in U.S.S.R. (5 ft.), Ireland (5 ft. 3 in.), and Spain and Portugal, India, and Argentina (5 ft. 6 in.); *narrow gauges* in Japan and S. Africa (3 ft. 6 in.), Kenya, Uganda, and India (partly) (metre), and generally for mineral and similar traffic (2-3 ft.).

Gauge, RAIN, an instrument for measuring the amount of rainfall at any place. In its simplest form a rain gauge consists of a funnel, 5 or 8 in. in diameter at the wide end, fitted into a narrow glass jar which holds the collected water, the whole being enclosed in an outer cylindrical vessel, open at the top. When in use the instrument is firmly fixed in an exposed position, the rim of the outer vessel being horizontal and *one foot* above the level of the ground. To prevent the water from splashing over during very heavy rains, and also to collect snow during high winds, the rim of the funnel should be 4 in. below the rim of the outer covering. The collected water is poured into a graduated vessel, and the amount of rainfall for a stated period, say 24 hours, is measured in inches. An inch of rain means the amount of rain that would cover the ground to the depth of 1 in. if none escaped by evaporation or by sinking into the ground. 10 in. of snow are reckoned as equal to 1 in. of rain, but by melting the snow collected more accurate measurements are obtained.

Geyser (*gá'ser* or *glá'ser*), a natural fountain throwing up a column of hot water or steam at more or less regular intervals. It consists of a crater-like basin above ground and a narrow passage leading underground. Water accumulates in the passage or in its

expansions, becomes gradually hotter until the pressure of the water overhead is overcome by that of the steam generated nearer the source of heat, and a column of hot water is shot up the tube into the air. This water falls back into the basin or around it, and on cooling or evaporating, deposits mineral matter which it has held in solution (mainly silica), and successive deposits form the basin. As geysers only occur in regions where volcanoes have been recently active, the source of heat is probably hot underground lava, and since geysers gradually cease working, the lava is probably cooling. The best known geysers are those of Iceland (near Mt. Hekla), Yellowstone Park, Wyoming, U.S.A., and North I. of New Zealand (near Lake Taupé).

Ghats (*gauts*), an Indian name used for mountain passes. The name is now applied by Europeans to the ranges of mountains running along the w. and e. coasts of India (W. and E. Ghats). Ghat is also used to mean a flight of stairs leading down to a landing-place on an Indian river (e.g. at Benares, on R. Ganges).

Ghee (*gá*), Indian name for butter clarified by boiling over a clear fire to resemble oil. The best quality is prepared from cow's milk, but buffalo-milk is also used. Ghee is a common article of diet among Indians, by whom it is also regarded as a valuable cosmetic and medicine, and a suitable sacrifice in religious ceremonies.

Ginger, an aromatic and pungent spice consisting of the sun-dried underground stems of the ginger plant, a native of s.e. Asia, now widely cultivated in tropical lands. It is yellowish in colour and fibrous in structure, and is exported in branched pieces, c. 3 in. long, from British E. and W. Indies and Sierra Leone. It is used for flavouring and for medicinal purposes, and when preserved in syrup (in the W. Indies and China) forms a popular sweetmeat.

Glacier (*glá'sier*), a mass of ice moving slowly down a valley. Above the **SNOWLINE** great quantities of

snow accumulate, forming *snowfields*. The snow in the lower layers is changed by pressure into *granular ice*, which is called *névé* (French) or *firn* (German), and is forced to move down the slope as a glacier, the granular ice, meantime, being transformed into blue crystalline ice. The rate of movement varies from a few inches to a few yards per day, but is not uniform, being fastest in the centre and slowest where the glacier meets the valley walls. The nature of the valley floor may also cause the lower layers of ice to move more slowly than the upper. This irregular movement causes cracks or *CREVASSES* to occur. During its progress the glacier smooths, scrapes, and scratches the rock over which it moves, and also the sides of the valley; the rocks thus treated are said to be *striated*. The glaciated valley becomes regular and usually U-shaped in section.

In the high altitudes, where glaciers are found, frost is very active in *disintegrating* or breaking up the rocks, and boulders and smaller pieces of rock which fall on a glacier are carried along with it. When this material is carried along the edges of the glacier it forms a *lateral moraine*. Some of the material which is pushed along the bottom of the glacier forms a *ground moraine*. When two glaciers join, two adjoining lateral moraines unite to form a thicker *medial moraine* down the centre of the resulting greater glacier. On reaching lower levels, where the sun is strong enough to melt the ice as fast as it advances, the glacier deposits its load as a *terminal moraine*, while the muddy water forms a river.

During the *Ice Age* a great part of N. Europe, including the British Isles, was covered by an immense sheet of glacier-like ice, or *ice cap*, 2,000 to 3,000 ft. thick. Parts of this ice sheet moved as glaciers in various directions according to the general slopes of the land. When the Ice Age passed, huge quantities of rock waste were thus left behind as moraines, and this soil

is known as *boulder clay* or *till*. Where a mass of hard rock obstructed the flow of the ice, the obstructing face was ground into a steep cliff, and the ice, flowing round the sides, piled up the rubbish in a long slope behind. On the disappearance of the ice a formation known as *crag* and *tail* was exposed (e.g. Edinburgh Castle Rock and High Street).

Mountain glaciers are numerous in the Himalayas, Caucasus, Andes, Rockies, etc. Those of the Alps, though well known, are really very small. Ice caps cover Greenland and the s. polar continent.

Glen, the Scottish name for a long narrow valley. Glens are usually traversed by rivers, and form the best means of communication in mountainous areas. Glenmore extends for 100 m. from the Moray Firth in the N.E. to Loch Linnhe in the S.W. Through it runs the Caledonian Canal, which links up Lochs Ness, Oich, and Lochy.

Graphite (*graf'it*), also known as *PLUMBAGO* and *BLACKLEAD*, is a soft, greasy, black, opaque mineral, composed almost entirely of carbon. It is found in its purest form most abundantly in Ceylon, Madagascar, Bohemia, Japan, U.S.A., and Cumberland (England); it is produced artificially in U.S.A. It is used in the manufacture of lead pencils, as a lubricant for machinery, as a polish for grates, and in making crucibles, type-metal, and anti-rust paints.

Grasslands, the treeless, grassy plains in the interiors of continents, between the forest belts and the arid regions. They are most extensive in the cold Temperate Zones, and are generally unsuitable for cultivation. In S. and S.E. European Russia, and S.W. Siberia, they are called *steppes*, in N. America *prairies*, and in Argentina *pampas*. In these regions temperatures are extreme, and rain, which only falls in summer, is scanty (under 25 in.). For part of the year these lands provide good grazing, and in the steppes stock raising by nomadic tribes is important. In the

steppes of s.w. Asia the growing season lasts only for a few weeks in spring and summer, but good crops of cereals, fruit, and vegetables are grown on irrigated land. In N. America much prairie land has been converted into farms, on which wheat and other crops are grown, but in the western parts, where rainfall is insufficient for crops, ranching is extensively carried on. The Argentine pampas are pasture grounds, but there are many fertile areas suitable for agricultural purposes. The Australian grasslands in the s.e. are great sheep-rearing grounds.

In subtropical regions, especially in Africa, grasslands are called *savannas*. The most extensive savanna land, a fine cattle country, stretches from Senegal to Abyssinia. Here during the growing season rainfall is adequate and temperatures are not so extreme as in the cold temperate grasslands. Grass is often 6 ft. high, clumps of trees occur like oases, and trees grow along the river banks. The *llanos* of the n.w. Orinoco Basin and of Colombia, and the *campos* of s.e. Brazil in S. America, are of a similar nature.

Great Circle, a circle whose plane passes through the centre of the earth. All meridians of longitude and the equator are great circles; parallels of latitude other than the equator are *small circles*. The shortest distance between two points on the globe lies along the arc of the great circle which passes through these points, and sailors take advantage of this by sailing along that great circle unless forced from it by land, ice, etc. In sailing due n. or s. the meridians are followed, but in going e. and w., except along the equator, great circles are followed which curve towards the n. and then towards the s. of parallels of latitude in the n. hemisphere, and towards the s. and then towards the n. in the s. hemisphere.

Ground Nut, EARTH NUT, MONKEY NUT, or PEA NUT, the fruit contained in the pod of a tropical plant of the

pea family, native of S. America, but now widely cultivated on the light sandy soils of India, W. Africa, China, and s. U.S.A. When the flowers of the plant give place to the seed-pod the stem (c. 1-2 ft. high) bends over to allow the pod to enter the soil where the seeds ripen (hence the name). The nuts (seeds) are eaten, fresh or roasted, in the lands which produce them, and in U.S.A. pea-nut butter is a popular preparation; they are largely imported into France, Germany, Great Britain, and Holland, where the oil is extracted for use as a salad oil and for other food purposes.

Gulf Stream. See OCEAN CURRENTS.

Gunny Cloth, a cheap, coarse material woven from *jute* fibres, and used for making sacks—e.g. for coal, and as packing for cotton, coffee, and other transported products. The main seats of the industry are Howrah (Calcutta) and Dundee (Scotland), but factories have been erected in many European and N. American centres. The largest importers of gunny cloth are U.S.A., Canada, Argentina, and Brazil. See *JUTE*.

Gurkhas (*goor'has*), the dominant race in Nepal, India. They are short and thick-set in build, and make very brave, faithful, and self-reliant soldiers. They rendered valuable service to the British in the suppression of the Indian Mutiny and during the Great War. Their national weapon is the kukri, a heavy curved knife.

Hachures (*hash'oor*), short lines drawn on a map to represent differences of slope. They are drawn from the highest point of a hill towards the base, and should cut contour lines at right angles. Short, dark hachures close together indicate a steep slope; longer, finer, and further apart hachures, a more gentle slope. The lines give the effect of shading on the map, but unlike contour lines they give no indication of height above sea-level.

Hanse Towns, the trading centres of

the Hanseatic League, or Hansa, a company of German merchants who almost monopolized the trade of N. Europe from the 13th cent. until the era of oceanic discoveries, and sank into insignificance during the Thirty Years' War (1618-48). During that long period the League maintained armed forces for checking piracy on the Narrow Seas and robbery on land, securing fair trade from neighbouring rulers, and obtaining commercial privileges from surrounding states. The headquarters of the Hansa were at Lübeck; among its principal depots were Wisby, Cologne, Brunswick, Danzig, Hamburg, Magdeburg, Halle, Frankfurt-on-Oder, and Thorn; and it maintained 'factories' at Bruges, London, Bergen, and Novgorod.

Harmat'san, a hot, dry, dust-laden, northerly wind which blows from the Sahara to the Gulf of Guinea from December to March. It is harmful to vegetation.

Hausas (*hou'sas*), an African people, of mixed Arab and Negro blood, living in Northern Nigeria between Lake Chad and R. Niger. They are agriculturists and very successful traders, using well-defined trade routes to the Mediterranean and Red Seas and the Gulf of Guinea. Among their manufactures are cloth, leather articles, and glass. Their language is the most important of the many languages of West and Central Africa, being used by more than 15,000,000 people all over Central Africa. In religion they are Mohammedans.

Head of Navigation, the highest point up a river to which a trading vessel can be safely navigated.

Hemp, fibre prepared from the bark of an annual plant, native of s. Asia, but cultivated on a large scale, under conditions of soil and climate suitable for flax, in Russia, Germany, Italy (which yields the finest quality), etc.; very little is raised in Britain. It is coarser and stronger than flax, and is used for ropes, cordage, and stout canvas (e.g. for sails). From the leaves

of hemp grown in India and other warm lands intoxicants and narcotics such as *bhang* (India) and *hashish* (Arabia, Egypt) are prepared; the resin, prepared as *charas* in Kashmir, is also smoked in India. Hemp seeds are used as a bird food; from them an oil is extracted. *Manila hemp*, obtained from the *abaca*, a tree of the banana family, is a product mainly of the Philippine Islands. It is used for the best class of ropes; the finer fibres are woven into delicate fabrics (e.g. for curtains); and from old ropes strong *manila paper* is made. See **FLAX**, **SISAL**.

Hinderland, or **HINTERLAND**, geographically the land which lies behind a seaport or seaboard, and to which it owes its size and importance as such. The hinterland provides the seaport with most of the goods to be exported from it, and provides a market in which the greater part of its imports will be distributed and sold. The size of the hinterland serving any port may depend to some extent on the ease of communication with the interior or the destination of the goods to be imported. Thus, although the W. Riding of Yorkshire is the hinterland of the Humber ports, it is also the hinterland of Liverpool for trade with America.

Hindus (*hin'doos*), the name applied to c. 215,000,000 of the people of India, adherents of the religion called Hinduism, which was founded c. 1000 a.c. These people represent about a dozen different nationalities and speak some six hundred different varieties of language. The Hindu is earnest and devoted in the service of his gods, every detail of his life being ordered by his religion. A prominent feature of Hinduism is the caste system, by which all Hindus are divided into classes or groups (c. 200), according to trade, profession, etc.

Horizon, the line bounding our view of earth or sea where earth and sky seem to meet. On land the spectator sees this *visible* or *sensible* horizon as a more or less irregular circle;

at sea it is a perfect circle, of which the observer is the centre, the distance of the circumference depending upon the elevation of the observer.

Horse Latitudes, belts of high atmospheric pressure over the ocean, in the N. hemisphere between the N.E. Trade Winds and the S.W. Variables, and in the S. hemisphere between the S.E. Trade Winds and the N.W. Variables. These belts vary in latitude according as the sun 'moves' N. or S. to the Tropics of Cancer and Capricorn. Like the Doldrums, they are regions of calms and light variable winds, but, unlike the Doldrums, the weather is comparatively bracing and dry.

Hot'tentots, S. African aborigines (calling themselves *Khoikhoi*, Men of Men), now chiefly inhabiting the western part of S. Africa. They are closely allied to the Bushmen in physical characteristics and language, which, from its use of 'clicks,' caused early Dutch settlers to name them Hottentots or stutters. They are of middle stature, yellowish-brown in colour, and have woolly hair. In habit they are a nomadic, pastoral people, living peacefully under a patriarchal form of government. In contact with white races they have been found to be cunning, lazy, and dishonest, and their character has become much degraded through intermarriage with the lowest types of white settler. They number c. 100,000.

Hydro-electric Power. See **WATER POWER**.

Ice, the solid form which water takes when it freezes. Ice is lighter than the water out of which it is formed, and therefore when lakes or seas freeze the ice floats on the surface, increasing in thickness as the cold continues. Along the shores of polar lands an *ice foot* is formed which rises and falls with the tide, and is driven by the waves against the shore, thus acting as a coast erosion agent. In the open polar seas slabs of *floe ice* are formed, which under the action of

winds and currents are thrown together and frozen into a jumbled mass known as *pack ice*, which adds greatly to the difficulties and dangers of communication in these regions.

On land ice acts as a powerful denuding agent. See **DENUATION**; **GLACIER**.

The manufacture of artificial ice has been of great service to commerce, as it enables foodstuffs to be preserved for long periods, and to be carried over long distances without becoming unfit for consumption.

Ice'berg, a huge mass of ice floating in the sea. In the N. hemisphere many glaciers reach the sea, where great irregularly shaped masses are broken off and carried southwards by the polar and Labrador currents to the W. Atlantic Ocean, where they are a great danger to ships. Round Antarctica the very thick, flat sheet of mingled ice and snow, forming a continuous glacier, is known as *barrier ice*. Immense blocks of this break off and form the *tabular* or flat-topped icebergs of the Antarctic Ocean. Only about one-ninth of the mass of an iceberg is visible above water. Arctic icebergs are often 200 to 300 ft. above water; many Antarctic icebergs are like huge islands, 200 ft. or more in height, and a mile or more in length.

Incas, an American-Indian tribe of Peru who claimed to be the Children of the Sun sent from heaven to subdue and instruct the other natives of the country. By their skill and prowess as soldiers they established a vast empire, stretching from Chile to Quito, and from the Pacific to Paraguay. They were a highly civilized people at the time of their conquest by Pizarro in 1533, being skilled as farmers, metal-workers, weavers, and potters, and had some knowledge of the arts and of astronomy. Centuries of oppression have much debased their character, though they still retain some of the virtues of their ancestors. Their language, called Quichua, is still spoken.

Indian Corn. See **MAIZE**.

Indians, natives of India; also, more commonly, the aboriginal inhabitants of America and the W. Indies. These were called *Indians* from the error of Columbus and other early explorers, who believed the newly discovered land to be near India. See **HINDUS** and **RED INDIANS**.

Irrigation, the artificial distribution of water from rivers or storage reservoirs for the growing of crops in parts of the world where farming is otherwise impossible owing to scanty rainfall. *Baling* water from wells by hand is probably the oldest method of irrigation, and is still practised in many parts of the world, particularly in India. Mechanical aids were soon invented, such as the *shadoof* in Egypt, consisting of a pole with bucket and counterweight, and the water-wheel used in Egypt and N. India. *Flooding* by the seasonal overflow of rivers, such as the Nile and the Ganges, provides what may be called a natural form of irrigation, and is very valuable because of the quantity of rich silt or alluvium so distributed. In the *reservoir system*, largely used in India, rain water is stored in tanks and distributed as required. Where rivers are available, reservoirs are formed by dams or barrages to store water at a constant level, and *irrigation canals*, with branches and distributaries, are led from them to supply large areas of level ground, a method largely in use in India, America, and Australia. An interesting method, employed in certain parts of England, is to flood fields with water in winter-time, the coldest and wettest part of the year, so as to protect the roots of grasses from the frost of winter. Such fields are called *water meadows*. Wherever irrigation is practised care must be taken to provide for adequate drainage, for if water is left stagnant in the soil it becomes more harmful than helpful to vegetation.

Islands, land areas surrounded by water. These occur in rivers, lakes, seas, and oceans. Some islands rise from a **CONTINENTAL SHELF** and are

called *continental islands* (e.g. British Isles). Others rise from great ocean depths and are known as *oceanic islands*. If an island is volcanic in origin it is called a *volcanic island* (e.g. St. Helena). In the tropical seas some islands are built up by *coral* polyps and are called *coral islands*. Sometimes islands occur in chains (e.g. Japan) or as groups, known as **ARCHIPELAGOS** (e.g. Philippines). The island of Australia is so large that it may be called a *continent-island*.

Isobar ('equal pressure'), a line drawn on a map to connect places which have the same average atmospheric pressure over a given period. Actual pressures are obtained by barometric readings, and corrections are made in order to reduce these to the corresponding pressures at sea-level. Reports of barometric pressure are received from stations in various parts of the country and from ships at sea, and from these weather forecasts can be made.

Isobath ('equal depth'), a line drawn on a map or chart connecting places where the sea is of the same depth. The unit of measurement is usually the fathom (6 ft.).

Isohyet (*i-so-hyet*) ('equal rain'), a line drawn on a map to connect places with equal rainfall during a given period. The unit of measurement employed may be the inch or the millimetre.

Isoneph (*i'so-neph*) ('equal clouds'), a line drawn on a map to connect places having the same average proportion of the sky obscured by clouds during a given time.

Isotherm ('equal heat'), a line drawn on a map connecting places with the same average temperature for a given time. Thermometric readings are taken at various stations, and corrections are made in order to raise the readings for all elevations to what the corresponding figures would have been at sea-level. The most important isothermal maps are those showing average winter and average summer temperatures.

Ivory, the hard, white substance that composes the teeth or tusks of certain animals, such as the elephant, hippopotamus, walrus, narwhal, and S. African wart-hog. Elephant tusks, which form the largest source of supply, are obtained principally in tropical Africa; a small supply of mammoth ivory, obtained from the curved tusks of a prehistoric elephant, is still exported from arctic Asia. Ivory is used for making billiard balls, handles for cutlery and toilet articles, piano keys, etc.; the parings and chips are carved into ornaments or used in inlaid work; and the dust serves for polishing and for preparing Indian ink. The principal ivory markets are London and Antwerp.

Vegetable ivory, prepared from the hard, white parts of the seeds of a S. American palm, is of much less value, and is made into buttons, toys, etc.

Jarrah. See EUCALYPTUS.

Jute, the fibre of the inner bark of two varieties of a slender-stemmed annual plant of the same family as the lime tree. The plant is a native of Bengal, where it grows 6-12 ft. high on the alluvial banks of the lower Ganges and Brahmaputra rivers. The fibre, which is weaker and less durable than flax or hemp, is prepared in much the same manner as flax, and exported, chiefly from Calcutta, in bales of 400 lb. With an annual production of c. 10,000,000 bales Bengal is still the greatest source of world supply. Jute is made into cordage, coarse cloth for gunny bags, and cheap carpets, the principal centres of manufacture being Calcutta and Dundee (Scotland). In Dundee jute yarns are also used in making Hessian canvas, coverings for furniture, and even velvets. See GUNNY CLOTH.

Kafir, also spelt KAFIR and CAFFRE, an Arabic word meaning 'unbeliever' (i.e. not a Mohammedan), originally applied to the Bantu peoples of S.E. Africa. The name is much resented

by them, and is properly falling into disuse. See BANTUS and ZULUS.

Kaolin. See CHINA CLAY.

Karri. See EUCALYPTUS.

Karst (Italian *Carso*), the term applied particularly to the limestone region of the Dinaric Alps, N.E. of the Adriatic Sea, and generally to any limestone region showing similar features—e.g. Causses (France), Ardennes, Pennines. In the Adriatic Karst the heavy rains disappear through fissures in the limestone and give rise to a system of underground streams, the surface being left dry and barren. The erosion caused by this subterranean drainage frequently leads to subsidence of the surface, and hollows are thus formed where surface water remains and rich soil collects; such fertile basins in Yugoslavia are called *dolinas* if of small extent, and *poljen* if more extensive. Below the surface great caverns or grottos are often formed in which are found the limestone formations known as *stalactites*, which resemble hanging icicles, and *stalagmites*, which seem to grow upwards from the ground to meet them. Both are formed by the slow dripping from the roof of water containing lime in solution. As this water evaporates the mineral matter is deposited both where the drops fall from the roof and where they reach the floor. Sometimes the upper and the lower formations grow till they meet, and thus form a pillar. The underground streams may find their way to the surface only at the coast or even under the sea.

Kauri (*kou'ri*), a species of pine which grows in the North I. of New Zealand to a height of 80 to 100 ft. It yields a strong, durable, and easily-worked timber greatly in demand for joiner-work, but now becoming scarce. Through the bark oozes a gummy fluid which hardens and falls into the ground. In Auckland this kauri gum is dug from the soils which were formerly covered with kauri forests, and is used in making varnishes.

Kham'sin (Arabic, 'fifty'), a hot,

dry, S.E. to S.W. wind, laden with sand and dust, which blows over Egypt for periods of two to three days during c. fifty days in spring. It causes discomfort, but is not usually dangerous to human beings.

Knot, a measure of speed (not of distance); 10 knots means a speed of 10 nautical miles *per hour*, a nautical mile being 6,080 feet or $\frac{1}{60}$ of one degree of latitude. In the days of sailing ships their speed was measured by dropping over the stern a 'log' attached to a reeled line which had knots at regular intervals; the number of 'knots' which ran off the reel in a certain time gave the number of nautical miles per hour which were being sailed by the ship.

Ko'la Nut, the brownish, bitter seed (about the size of a chestnut) of a tropical tree, a native of W. Africa, and introduced into the W. Indies and tropical S. America. The nut is chewed by Africans to relieve hunger and fatigue. It is exported from the Gold Coast and Sierra Leone; from it *caffeine* is extracted.

Kuro Shiwo. See OCEAN CURRENTS.

Lac, a dark-red resin produced by the action of an insect on the sap of certain trees in N.E. India. It is so named because of the infinite number (see next article) of insects required for its production. Twigs covered with this substance form *stick-lac*; from these the resin is removed by washing, and melted to form *shellac*, which is used in making varnishes, and is the principal ingredient of sealing-wax. Shellac is exported chiefly from Bengal. From lac a scarlet dye is also obtained.

Lac or Lakh, in India, a hundred thousand; e.g. a lac of rupees = 100,000 rupees.

Lacquer, a varnish prepared from shellac applied in Western lands to metals to give them lustre or prevent tarnishing, in Eastern lands to thin wooden wares for purposes of ornament. Lacquered wares are most

largely imported from Japan and China; in appearance they rival highly glazed porcelain, and are often beautifully decorated with gold foil (Japan), or by cutting through successive layers of differently coloured lacquers (China).

Lagoon, a shallow stretch of salt, brackish, or even fresh water cut off from the sea, either partly or completely, by a spit of land. Lagoons are found inside atolls or fringing coral banks, and also on sea coasts where banks of sand, mud, or gravel have been formed which shut off bays or inlets from the sea. Lagoons which run parallel to the coast are found on the Baltic coast of Germany, where they are known as *Haffs*.

Lake (Scottish *Loch*; Irish *Lough*), a stretch of inland water occupying a depression of the earth's surface. Small lakes are called pools, ponds, tarns, etc. *Fresh-water lakes* are found in surface hollows, e.g. Loch Leven, in river expansions, e.g. Lough Derg, in rift-valleys, e.g. Lake Nyasa, or in volcanic craters, e.g. Crater Lake (Oregon, U.S.A.); they are often the result of glacial action, some lakes being formed by the blocking of valley mouths by morainic material, e.g. L. Garda, others by the collecting of water in cirques, e.g. Glaslyn (Snowdon). Lakes which have no outlet become *salt lakes*. The river water which enters such a lake is removed by evaporation, but the small amount of salts which it holds in solution remains in the lake. The water of the lake thus becomes highly impregnated with salt, e.g. the Dead Sea, whose water is thirteen times as salt as that of the open ocean. The terms *loch* and *lough* are also applied to arms of the sea, e.g. Loch Linnhe, Lough Foyle.

Land and Sea Breezes, a form of periodic wind occurring daily on the sea coasts of countries. They are due to the unequal heating of the surface of the land and of the sea under the sun's rays. The surface of the land is quickly heated, and also loses its

heat quickly. The sea heats more slowly and to a greater depth, and retains its heat longer. It follows that the air over the sea does not vary in temperature so much or so quickly as that over the land. Thus during the day, when the land surface becomes hotter than the sea surface, the air above expands and becomes lighter, and cooler air flows from the sea to the land as a *sea breeze*. Towards evening, the land surface becomes quickly colder than the sea surface. The air above the land also cools and becomes heavier than that over the sea, and this heavier air flows from the land to the sea as a *land breeze*. Such land and sea breezes are usually most strongly felt in tropical regions, but may not be felt at all if they are overpowered by some stronger wind due to different causes.

Landes (land). See DUNES.

Latitude, the angular distance of any place on the earth's surface N. or S. of the equator, the equator being represented by 0° , and the angles calculated as at the centre of the earth. Places in the plane of the equator are therefore in lat. 0° , while the N. and S. Poles are in 90° N. and S. latitude respectively. A line passing through all places that are, say, 10° N. of the equator must be parallel to the equator, and all such lines are therefore called *Parallels of Latitude*. We speak of a place as having a *low* latitude if it is near the equator, and a *high* latitude if it is near the poles. While a degree of latitude is an angular measure, it has been possible to find its equivalent as a linear measurement on the earth's surface. Thus one degree corresponds to 68.7 m. Owing to the flattening of the earth's surface near the poles this distance increases slightly, and in the highest latitudes becomes 69.4 m. A traveller or navigator finds the latitude which he has reached by calculations based upon the altitude of the sun or of particular stars above the horizon.

Lava, rock-forming substances melted by heat and poured out from

the earth's interior through volcanic vents; the name is also given to the rock when cooled and hardened. Many lavas break up into soils of great fertility, e.g. in Campania and Sicily (Italy), Java, Japan, N.W. U.S.A., S. Brazil, and Hungary. See VOLCANO.

League of Nations, an association set up by the leading nations of the world on January 10, 1920, as a part of the Treaty of Versailles which concluded the Great War, with the main object of preserving international peace. This it seeks to do by encouraging the reduction of armaments and the settling of disputes by arbitration or agreement. The peoples represented on the League have agreed not to enter into secret treaties with one another, and to observe justly and fairly all treaty obligations. In addition to this, the League has done valuable work for backward or uncivilized peoples by seeking to ensure that their lands shall be governed for the betterment and in the interests of the native inhabitants themselves. On this understanding certain territories, former overseas possessions of Turkey and Germany, have been handed over for government, under Mandate of the League, to different Allied countries. These governing nations are called *Mandatory Powers*, and the territory so handed over is known as *Mandated Territory*. The League also undertakes the protection of minorities, that is, of people living within a state the governing race of which outnumbers and is different from their own, seeking to ensure for them free exercise of their religious rights and the free use of their native tongue, with opportunities of education in their own language. It is also doing much for the improvement of the health of the world by its organization for the study of and methods of combating various widely-spread diseases. In 1930 the League of Nations included over fifty of the countries of the world.

Levee (*li-é'* or *let's*), an embank-

ment designed to keep the river Mississippi within its proper channel, particularly in its middle and lower reaches, where vast stretches of valuable arable land may be laid under water by floods. The necessity for levees is due to the quantity of silt which is carried down by the river, and by which its bed at many places has actually become higher than the surrounding country. The river itself, as it flows through its alluvial plain, also builds natural levees by the deposit of silt along its banks.

Lignite, a brown, woody coal showing traces of vegetable matter much less altered than in ordinary coal, and containing c. 70 per cent. of carbon. It is inferior in burning qualities to black coal, 9 tons of lignite being regarded as equivalent to 2 tons of black coal. It is produced most largely in Germany, Czechoslovakia, Austria, U.S.A., and Canada.

Llama (*llá'má*), a woolly-haired, humpless member of the camel family, standing c. 3 ft. high, native of the Andes of S. America, where it is domesticated. It is a sure-footed beast of burden, carrying c. 100 lb., and is valued also for its wool. See **ALPACA**, **VICUÑA**.

Llanos. See **GRASSLANDS**.

Local Time. See **TIME**.

Loch. See **LAKE**.

Lo'eust, an insect of the grasshopper family, c. 2 in. long, travelling by jumps in its early stages, and flying when full grown. It breeds largely in treeless arid regions, especially of the hot temperate belt. 'From time to time they invade cultivated fields, where they arrive flying in thick solid masses, filling the air, darkening the sun, forming an immense, unbroken cloud which may take more than an hour to pass by, and when they settle, consuming every green thing to be seen, the working of their jaws meanwhile causing a sound that can be heard at a great distance' (Chisholm, *Handbook of Commercial Geography*. See also Joel ii. 1-11). Their ravages are most severe in E. Europe, W. Asia,

N. and S. Africa, and Argentina. When the breeding grounds are known the eggs may be destroyed; during migration on foot trenches are dug to trap the swarms; and poisons are sprayed over vegetation by aeroplanes to reduce the flying army. In some countries locusts are prepared as a human food.

Lo'eust Bean, the fruit of the carob tree. See **CAROB**.

Lo'ess (German *Löss*), a yellowish, fine-grained soil found especially in the basins of the Rhine, Rhone, Danube, Missouri, and Hwang-Ho. It is a loam, or mixture of sand and clay, rich in lime, and has been borne by wind to its present situation. In N. China it is remarkably fertile under irrigation; the famous **BLACK EARTH** of Russia is of a similar formation.

Longitude (*lon'jítüd*), the angular distance of a place, measured in degrees, as at the earth's centre, E. or W. of a given point. In Britain Greenwich is taken as the fixed point from which longitude is reckoned, and the meridian line through Greenwich is called the first or prime meridian and marked 0°. From this line longitudes are measured up to 180° E. or W. Some countries use a prime meridian of their own, but since 1884 there has been general agreement among other countries to use that of Greenwich. Owing to the relation between longitude and time it is possible for a traveller or navigator to determine his exact longitude by comparing the local time of mid-day with that of Greenwich as shown on his chronometer. See **MERIDIAN** and **TIME**.

Lough. See **LAKE**.

Lucerne. See **ALFALFA**.

Macaro'ni, a food prepared from a paste made, principally in Italy, from the flour of hard varieties of wheat, and generally forced through tubes which give it a pipe-like form. Smaller kinds of macaroni are known as *spaghetti* and *vermicelli*.

Magyars (*mod'yors*), the predomi-

nant race in Hungary. They are a branch of the Mongolian family, and are closely allied to the Finns. They settled in Hungary in the 9th century, and although before the Great War they formed barely half the population of the country, they had for long dominated it, their language being the official language of Hungary, and the official name of the country being *Magyarország*, or country of the Magyars. They are a people remarkable for their energy and courage, their quick impulsive temperament, and their intense patriotism.

Maize (*māiz*), or INDIAN CORN, the grain of a cereal which grows 6 to 18 ft. high in lands with a higher temperature and heavier rainfall than are suited for wheat. It is a native of the Americas, whence it has been introduced into all tropical and subtropical countries, except those with 'Mediterranean' climates, which are unsuited for the crop. It is most largely produced in U.S.A.; the greatest exporters are Argentina, U.S.A., Romania, and S. Africa; and Britain is the chief importing land. Maize supplies food for man as well as for beast; the unripe heads are cooked as a vegetable, and coarsely-ground maize is prepared as *hominy* and *mush* in U.S.A., as *tortillas* in Mexico, as *polenta* in Italy, and as *mamaliga* in Romania; some is ground as *corn-flour* in U.K.; and it is the *mealies* of S. Africa. In most countries maize is fed to farm animals; and much is also used in breweries and distilleries.

Malaria, also called AGUE or INTERMITTENT FEVER, and, in its deadlier forms, YELLOW FEVER and BLACK-WATER FEVER, an infectious disease commonest in the marshy districts of warm and tropical climates, and the cause of more sickness and of a greater number of deaths than any other disease. For this reason, and because of its weakening effects on those who do recover, it has had a marked influence in hindering the development of the tropical regions of the world, and until it has been conquered

progress in trade, civilization, etc., in these regions must be very slow. The disease takes many forms, but is always due to the one source of infection, the mosquito, which carries the micro-organism of the disease from the blood of one affected person to the blood of another. Much has been done in the conquest of the disease by draining the marshes (breeding-place of the mosquito), by destroying the insects, and by educating the native population of tropical countries in the right measures to be adopted for cure and for safeguarding themselves from infection. Notable results have followed the adoption of such methods in Italy, Ismailia, the Federated Malay States, and, above all, the Panama Canal Zone.

Mallee (*māl'ē*), the name given in Australia to low-growing species of eucalyptus or gum tree. Such stunted gums form the scrub country of the lower basin of the Murray-Darling river system. Some mallees are of use for the strong oils distilled from their leaves; none yields timber of commercial value. Much mallee scrub has been rolled down by traction engines or other means and burned off to form wheat lands. See EU-CALYPTUS.

Man'date. See LEAGUE OF NATIONS.

Man'grove, a tropical tree or shrub from whose trunk and branches aerial roots are sent downwards into the ground to form new trees. Such mangrove forests thrive in the salt marshes and the coastal muds of equatorial lands (e.g. Nigeria). The bunched roots serve to arrest soil and vegetable matter, and thus act as agents of reclamation in impenetrable, malarial areas. Mangrove bark is used in medicine, and yields the tanning material known as *cutch*.

Manila Hemp. See HEMP.

Man'ioc. See CASSAVA.

Maoris (*mou'rēz*), the aboriginal race of New Zealand. They form a branch of the great Polynesian race which inhabits the various islands of the east Pacific Ocean. A vigorous and intelli-

gent people, they are generally brown in colour, with thick lips and straight black hair, and practise tattooing their bodies. They number c. 55,000, the majority of whom are found in North Island. While there was much fighting between the Maoris and the British settlers in the early years of the 19th century, they are now peaceable, loyal, and contented citizens of New Zealand, possessing full citizenship and sending representatives to parliament. The majority are farmers. The State provides them with free education, so that most of them can now speak and write English, though they still retain their Polynesian speech among themselves.

Map, a flat representation, on paper or other substance, of the surface of the whole or any part of the globe, to show physical, political, or other features or distributions. A collection of maps of various parts of the earth's surface is called an *atlas*. A *bathymorphological* map shows depths of the oceans and heights of the land; a *political* map indicates the boundaries, chief towns, railways, etc., of countries; other maps show climatic phenomena, distributions of peoples, languages, products, etc. The most accurate maps are those prepared from actual measurements by the skilled surveyors of the *Ordnance Survey* Office of our own or other countries; maps of comparatively unknown areas (e.g. parts of Africa) are drawn from sketches made by travellers and explorers, but more accurate maps are now made by using aeroplane photographs of such parts. For general use atlas and wall maps are prepared by drawing a network of lines of longitude and latitude according to some mathematical scheme (see *Projection*), and marking the outline and other features in strict relation to such lines. It is important to note the *scale* of a map, and the method employed to show *relief* thereon. The scale is usually indicated by a representative fraction (R.F.) which states the number of units on the ground

represented by one unit on the map—e.g. 1 : 1,000,000 means that one unit (inch, centimetre, etc.) on the map represents one million of that unit on the earth's surface. This scale of 1 : 1,000,000 has been selected for the International Map of the World. Relief is shown by contouring (see *Contour Lines*), and slope by *Hachures*. On certain maps contours are chosen (e.g. 500, 1,500, 3,000 ft., etc.), and the land areas between are distinctively coloured; ocean depths are indicated by a scheme of blue tints. Such maps are known as *layer maps*. *Relief* maps really represent models of the earth's surface; on them altitude is necessarily exaggerated. Any exact representation of the earth must be drawn on a globe; on it direction and distance, as well as area, may be most correctly determined. See *Chart*.

Massi (*masi*), an African people residing mostly in the Great Rift Valley which lies E. of L. Victoria. They are an aristocratic people, warlike, of fine physique, well-built, tall and slender. The women and boys do all the menial work, while the men spend the prime of their lives as warriors, living apart from the rest of the tribe in separate kraals or villages. Their weapons are the spear, the knob-kerry, and a kind of sword. Their staple diet consists of milk, blood, and meat.

Maté. See *YERBA MATÉ*.

Mediterranean Climate and Flora, the climatic conditions existing in lands bordering the Mediterranean Sea and the special type of vegetation resulting therefrom. Similar climatic conditions are found in the coastal areas of Central California, Central Chile, Cape of Good Hope region, S.W. and South Australia. This type of climate is marked by mild, humid winters and warm, dry summers. All the above areas lie between 30° and 40° N. or S. latitude on the fringe of the trade wind belts. Owing to the seasonal change in the position of the sun, the position of these belts also

varies, moving s. as the sun moves to Capricorn, and n. as it moves to Cancer. In these areas trade winds prevail in summer, and these are dry winds because they blow over land and are moving to warmer latitudes, and can therefore hold more moisture. In winter, westerly winds, blowing off the sea, prevail and bring adequate rainfall. The resulting vegetation is of a type which can resist the summer drought, having small, thick, often thorny leaves to prevent too rapid evaporation, bulbous roots and watery fruits in which water is stored. Where conditions are favourable there are evergreen forests of cork-oak, cedar, mulberry, and chestnut trees. The typical fruit-bearing trees are the olive and the vine, along with the citrus group of oranges, lemons, limes, grape-fruit.

Meridian, one of the great circles on the earth's surface passing through the poles and cutting the equator at right angles—also called a line of longitude. Strictly speaking, a meridian is only half a great circle, lying between the North and South Poles, on which all places have noon at the same time; on the other half of the great circle all places have midnight at that time. At the equator the linear distance between any two meridians, corresponding to one degree of longitude, is 69.2 m., but as all meridians converge to pass through the poles, this distance diminishes gradually with the distance from the equator. Thus at 50° n. latitude the linear distance corresponding to one degree is only 44.5 m. See **LONGITUDE** and **GREAT CIRCLE**.

Merino (*me-rē-no*), a fine-wooled sheep, native of n. Africa, whence it was introduced first into Spain and later into Saxony, England, Cape of Good Hope, Australia, U.S.A., and Argentina. Its abundant wool surpasses all other kinds in fineness; its mutton, however, is relatively poor in quality and quantity. The name merino is applied also to goods containing fine, soft wools.

Mese'ta, the extensive tableland of Spain, occupying c. three-fourths of the surface of the country, and composed of an ancient and much broken and eroded block of the earth's crust. It consists mainly of flat-lying strata, and descends abruptly to the plains of Andalusia in the s., and those of Aragon in the n.

Me'teorite, a mass of mineral or stony matter, generally containing iron and nickel, which falls to the earth from outer space. When a small meteorite traverses the earth's atmosphere it is heated by the friction of the air and becomes incandescent, and is therefore often called a *falling star*. When small they are disintegrated by the heat, but larger ones may strike the earth; in weight they may range from less than 1 lb. to over 70 tons.

Meteorol'ogy, the science of atmospheric phenomena in relation to weather and climate. It thus includes the study of *air temperature* and *pressure*, *wind*, and *precipitation*. Rays from the sun heat the earth's surface, whence the heat passes by radiation and convection into the atmosphere. Hence air temperatures are highest at the earth's surface, and decrease with altitude at a rate of about 3° F. per 1,000 ft. Owing to the curvature of the surface of the globe the same amount of sun-heat is distributed over a larger area towards the poles than within the tropics, so that average temperatures decrease from the equator polewards. The earth's rotation on its axis explains the variation of temperature from day to night. There is also a *seasonal* variation of temperature depending upon the earth's revolution round the sun. The temperature of the oceans is more constant than that over the lands.

As a result of gravity the atmosphere is densest at the earth's surface, where the mean pressure produces a barometric reading of 30 in. or 760 mm. This decreases with elevation, the rate of decrease being about 1 in. for each 1,000 ft. Owing to move-

ments in the atmosphere, barometric pressure is constantly varying, and the barometer sometimes indicates readings of over 30 in., at other times pressures below that figure. Air moves outwards from a high pressure area (see ANTICYCLONE) to fill up areas of low pressure (see CYCLONE); such moving air is called wind.

As a result of evaporation over water surfaces the atmosphere contains a certain quantity of water-vapour. This capacity for water-vapour increases with a rise of air temperature until saturation point is reached. If the temperature of saturated air is lowered it cannot contain so much water-vapour, and some is precipitated. Hence rain falls when air temperatures fall, as they do when air moves upwards (e.g. over the Doldrums), or if the winds, which carry the water-vapour over the lands, blow towards the poles (i.e. from a warmer to a cooler area), or are forced to rise over mountainous areas where pressure is less and air expansion is accompanied by loss of heat.

In most civilized countries meteorological offices have been established to record all meteorological observations, and by preparing weather charts, to forecast the weather from day to day. See ATMOSPHERE, CLIMATE, CONDENSATION, EVAPORATION, RAINFALL, RADIATION, SEASONS, TEMPERATURE, WIND.

Midnight Sun, a phenomenon of high latitudes, at and near midsummer, during which the sun, though skirting the horizon, does not dip below it. At North Cape, in lat. $73\frac{1}{2}^{\circ}$ N., the sun is visible at midnight from 12th May to 29th July.

Migration (1) OF PEOPLES. The movement of peoples from one part of the earth to another. Such movements have taken place from the very earliest times. In primitive times, when man followed a pastoral life, his migrations were regulated by the necessity of finding fresh pasture for his flocks. By gradual stages this led to the peopling of the habitable earth.

Sometimes the need for food for himself decided his migrations, as with the Eskimos to this day, who in winter move to the sea coasts to catch seals, and in summer may move inland to regions where they can hunt the reindeer or musk-ox. Decisive changes in climate will also cause the movements of large masses of people, as in the desert part of Central Asia, where we find the remains of former civilizations. In more modern times, while these causes still operate, others appear. The desire to obtain freedom, religious or otherwise, caused the migration of the Pilgrim Fathers to America, the Huguenots to Britain, etc. Religious enthusiasm led to the Mohammedan invasion of Europe and the foundation of the Moorish kingdoms of Spain and N. Africa. With the great geographical discoveries of the 15th century a new epoch in the history of migration began and a new motive operated. The vast new continents offered unlimited resources, and so a steady flow of people from the Old World to the New set in. These people were actuated by love of adventure or lust for gold, or desire to escape from the overcrowded old countries, with their attendant evils of unemployment, hunger, etc., to the newer, less congested lands.

(2) **OF ANIMALS.** Large numbers of animals, too, are remarkable for their periodic movements from one place to another. Speaking generally, these movements are determined by the supply of food or water, or by the need for obtaining suitable breeding-places in which the young may be reared in security. These movements are most general and are most easily observed among birds, practically all of which seem to be migratory to some extent. In Britain some birds, such as the swallow and the cuckoo, are summer visitors, while others, such as the fieldfare and the redwing, are winter visitors, coming from the north in autumn, remaining here throughout the winter, and returning to their northern breeding-places in spring.

There are also birds of passage which rest in this country for a little on their longer journeys farther north or south. These movements are seasonal, as are those of most mountain animals, such as the reindeer or the wild asses of the Asiatic Steppe, which alternate between one feeding ground and another as the seasons make one or another more suitable. More extensive and more definite are the migrations of certain aquatic mammals, primarily for the purpose of finding safe breeding-places. Thus the Alaskan fur seal in winter travels as far south as California, and returns in spring across the Northern Pacific to its breeding-place at the Pribilof Islands, a distance of c. 2,000 miles. Migrations of similar type occur among fish—the periodic movements of the salmon, the eel, herring, and mackerel being familiar examples.

Millet, the name given to several kinds of a cereal grass which yields a small-sized grain, used as food for human beings in Asia and Africa, and for fowls in Europe and America. Most important are the tropical millets, especially the *Great Millet*, extensively grown in India, where it is known as *Jowar*, and in Africa as *Durra* or *Guinea Corn*; and the *Spiked Millet*, called *Bajra* in India. Neither enters largely into world trade.

Mirage (*mir-āsh*'), an optical illusion in which an observer sees images of distant objects either apparently below the ground level or high up in the atmosphere. Thus, in hot climates, such as that of the Saharan desert, an observer often sees towards the horizon what appears to be a sheet of water shimmering in the sunlight; in Arctic regions, also, it is not uncommon for sailors to discover the proximity of other ships, which may be far beyond the horizon, by seeing the images of these ships reflected in the air. Sometimes double images of an object may be seen—the one that of the object itself, the other an inverted image of it much magnified. Some-

times distant coast-lines, as much as 50 miles away, can be seen across the sea with the greatest distinctness. The sailors' term for such appearances is 'looming.' Whatever forms the mirage takes they are all caused in the same way—by variations in the density of different layers of air, as a result of which the rays of light passing from any object are bent and present a distorted image to the observer.

Mis'tral, a north-westerly wind which prevails at certain seasons of the year, particularly from late autumn to early spring, on the south coast of France, being most marked in the Rhone delta, where Marseilles experiences it, on an average, on 175 days of the year. It is a strong dry wind, and is generally accompanied by cloudless skies, brilliant sunshine, and piercing cold. It is due to the unequal pressure of the air over the Mediterranean and that over the colder lands of the north. The lower pressure over the sea causes the heavier air from the north to flow towards the south.

Mohair. See ANGORA GOAT.

Mohammedanism, or ISLAM, one of the great religions of the world, with c. 175,000,000 adherents. Founded by Mohammed in Arabia in the 7th century, during his lifetime and for centuries afterwards the area of its influence was widely spread, chiefly through conquest, till now it is professed by large numbers in N. Africa, India, E. and S.E. Asia and Turkey. Its fundamental tenet is that 'there is no God but God, and Mohammed is His prophet.' It enjoins on its followers the importance of prayer, almsgiving, fasting, and pilgrimage.

Monsoons, seasonal winds that blow over the Indian Ocean and adjacent lands. In the winter months, from October to March, the monsoon blows from the N.E.; in the summer months, from April to September, from the S.W. The N.E. monsoon is the regular TRADE WIND of the N. hemisphere. In summer the great heat over S. Asia

causes this area to be the heat equator for the time, and the air there to be lighter than that over the Indian Ocean. The air passes from the area of high pressure over the ocean to that of low pressure over the land. The S.E. trade wind of the S. hemisphere accordingly crosses the equator, but owing to the rotation of the earth is deflected and becomes the S.W. monsoon. The change from one monsoon to the other is accompanied by violent storms. Similar monsoon conditions prevail, though to a less marked degree, in the S. hemisphere, particularly in parts of Australia.

Moraine. See GLACIER.

Mother-of-pearl, a lustrous, iridescent substance forming the internal layer of the shell of many molluscs, especially the pearl oyster. It is exported from N. Australia, Ceylon, etc., and is used for inlaid work, cheap jewellery, and knife handles.

Mountain, an elevated mass of land, generally more than 2,000 ft. above sea-level. Mountains may be the result of earth movements, of EROSION, or of volcanic action. As a result of earth movements the earth's crust may be 'wrinkled' in parts and form *folded mountains*—e.g. in Eurasia nearly continuous lines of folds may be traced from the Atlas Mts. through the Alps and Caucasus, to the Himalayas and ranges of Malaya, with peaks rising to upwards of 20,000 ft. By erosive action, especially of water and ice on plateaus, the harder parts may be left as mountains while the less resistant rocks round about are removed. Such mountains are called *mountains of circumdenudation* (e.g. Ben Nevis, Table Mountain). Volcanic mountains are *mountains of accumulation*, built up of the lava and ash poured out through volcanic vents (e.g. Mt. Egmont); * they generally have a conical form. Mountains have always been barriers to migrating peoples; they are generally thinly populated.

Municipal Borough, in England a town of less than 50,000 inhabitants,

governed, since 1835, by a town council, consisting of a mayor, aldermen, and councillors elected by the citizens of the town. In Scotland the word *burgh* corresponds to the English *borough*, and the term corresponding to the above is *Parliamentary Burgh*, a Scottish burgh being governed by a provost, bailies, and councillors. See also ROYAL BURGHS.

Muskeg, a name of Red Indian origin applied to the boggy, waterlogged lands of N. and N.W. Canada.

Nautical Mile. See KNOT.

Neap Tides. See TIDES.

Negritos (*ne-grî-tos*), the name originally given by the Spaniards to the aboriginal inhabitants of the Philippine Islands, but now extended to include all similar peoples in S.E. Asia and Oceania. The Negritos are generally very dark in colour, have short, black, woolly hair, are short in stature (not more than 5 ft.), and have the flat nose and other physical characteristics of the Negro. They are at a very low stage of culture, as is indicated by the absence of fixed houses, of all arts, of religion, and of all weapons save the bow and arrow. The chief groups are the Aetas of the Philippines, the Semang of the Malay Peninsula, the Tapiro of New Guinea, and the Andamanese.

Negroes, the principal race inhabiting Africa. The name embraces, however, all the black races of the intertropical regions of the eastern hemisphere from West Africa to the Fijian Islands in the Pacific. The *Negro proper* is represented by those tribes that live in Africa between the Barbary States on the north and the Congo on the south. All others may be grouped under the term *Negroids*, and include the Bantu-speaking peoples, the Hottentots, the Bushmen, and the Zulus of Southern Africa, the Papuans of New Guinea, the Melanesians of the Solomon and Fiji Islands, and the Australian aborigines. The Negroes of the Sudan are the best representatives of their type. They

are tall, have thick lips, short flat nose, woolly hair, and black skin. The skull is generally long and narrow. In their primitive state the Negroes represent a very low stage of culture, and it is uncertain what the possibilities of their development may be. The Negro is usually an agriculturist, an occupation which he diversifies with hunting, fishing, and, more rarely, cattle breeding. His diet is mainly vegetarian, the chief article being either manioc or mealies. Formerly cannibalism was widespread, but is now much less common. He generally lives in a community ruled by a chief, though in some parts, where conditions were favourable, kingdoms of considerable size have been formed. In certain crafts the Negro shows both aptitude and skill, such as iron smelting and working, carving, pottery, and weaving. His primitive religion takes many and varied forms. The foreign religion which has appealed most to the Negro is Mohammedanism.

Névé. See GLACIER.

Nitrate, the commercial contraction for nitrate of sodium, potassium, or calcium. Nitrate of soda (*caliche*), a product of the Atacama Desert (Chile saltpetre), is used as a fertilizer, and in the manufacture of glass, soap, and nitric and sulphuric acid. Nitrate of potassium (potash), used in the making of gunpowder, glass, etc., is largely produced from the deposits at Stassfurt (Germany). Calcium nitrate, or lime saltpetre, prepared from atmospheric nitrogen, is used as a fertilizer and in making nitric acid.

Nomads, primitive peoples who have no settled habitation but move from place to place, generally in quest of food either for themselves or for their flocks and herds. People of this type are found in every large continental area. Thus in Europe there are the gipsies, in Asia the Khirgiz, in Africa the Bedouin and the Hottentots, and in Australia the aborigines. See MIGRATION.

Nutmeg, an aromatic spice consisting of the kernel of the fruit of an

evergreen tree native of the Moluccas, where it is still widely grown, and now also cultivated in the Straits Settlements, India, and the tropical Americas. It is ground or grated for use in flavouring dishes. From small and inferior nutmegs oil of mace or nutmeg butter is extracted; from the coat or skin round the kernel another spice—mace—is prepared.

Oasis (*ô-d'-sis*), a place in a desert area rendered fertile by the presence of water. The best-known oases are those of the Sahara and the Libyan Desert of Africa. The water may come from outside the desert area, as in the case of the river Nile, which creates by its floods the great oasis of El-Khargeh in Egypt, or it may be derived from a spring. Oases may sometimes be created by the sinking of artesian wells, as has been done by the French in N. Africa. They vary greatly in size, some supporting a large and settled population, others serving merely as halting-places in the desert. The characteristic form of vegetation is the date-palm, in the shade of which cereals and other food plants are cultivated.

Ocean, the great, continuous sheet of salt water which surrounds the land masses on the earth's surface. This covers 72 per cent. of the surface of the globe, and is divided by the continents into large portions, each of which is also known as an ocean, viz., Atlantic (31,000,000 sq. m.), Pacific (64,000,000 sq. m.), Indian (29,000,000 sq. m.), and Arctic (5,400,000 sq. m.). Near the continents the floor of the oceans has a gentle slope, but beyond the continental shelf the depth quickly increases. The floor of the ocean is not a uniform plain, but, like the land surface, is diversified by ridges and deep valleys. The greatest known depth, 35,000 ft., is east of N. Mindanao, one of the Philippine Islands, and the average depth of the greater half of the ocean is over 12,000 ft. The surface temperatures vary from 80° F. near the equator to below

freezing point near the polar circles. The *salinity* or saltiness of the water also varies, being greatest where evaporation is most rapid, and least where there is a large supply of fresh water from rain, rivers, or ice. In all depths animal life is found.

Ocean Current, a movement of the surface water of the ocean. Currents are the result of prevailing winds, or differences of temperature, or differences of salinity. Currents which are caused by prevailing winds are known as *drift* currents. These follow the directions of the winds except when contact with islands, submarine ridges, coast-lines, or other currents forces them out of their paths. The rotation of the earth also alters their directions. A current is named from the direction in which it flows. Currents flowing from the *n.* or *s.* polar regions are *cold*; those from the equator are *warm*. Cold currents wash the *east* coasts of continents in the *n.* hemisphere, and the *west* coasts in the *s.* hemisphere; warm currents wash the *west* coasts of continents in the *n.* hemisphere, and the *east* coasts in the *s.* hemisphere.

The best-known drift current is the **GULF STREAM**. This is formed from the equatorial drift current which enters the Gulf of Mexico from the Caribbean Sea, flows round it, and finally leaves the Gulf by Florida Channel between Florida and Cuba; it then flows along the *e.* coast of the U.S.A. as far as Cape Hatteras, where it broadens out and, assisted by the prevailing *s.w.* winds, flows eastward across the Atlantic Ocean as the *Gulf Stream Drift*. About half-way across the Atlantic it divides into two parts, one portion proceeding *e.* and *s.* to skirt the *w.* coasts of Spain and *n.* Africa, the other portion flowing *n.e.* and continuing its course under the influence of the prevailing winds till it reaches the British Isles, Norway, and the Arctic Ocean. The Gulf Stream leaves the Gulf of Mexico as a river of very salt water *c.* 50 m. broad and 2,000 ft. deep, moving with a speed

of *c.* 5 m. per hour, and having a surface temperature of 80° F. Speed and temperature gradually decrease, and the portion of the Gulf Drift reaching the British Isles has a speed of *c.* 4 m. per day and a surface warmth of 60° F. From this warm surface drift *n.w.* Europe largely derives its mild winter climate. The corresponding stream in the Pacific is the *Kuro Shiuo* ('black stream'), a warm current which washes the shores of Japan and reaches the *w.* shores of N. America.

Currents due to differences of temperature are called *convection* currents. From the equator warm surface water moves very gradually towards the poles, where it cools, sinks, and very slowly moves along the ocean floor towards the equator, where it rises to replace the large amount of water lost by evaporation and by the movement towards the poles. By this very important circulation the ocean deeps never become stagnant.

Currents arise from differences of salinity. As the Mediterranean Sea receives few rivers, has a small rainfall, and is subject to great evaporation, it is saltier than the Atlantic Ocean in the same latitude. A fresher surface current enters from the Atlantic, while a saltier under-surface current flows out into the Atlantic. If this were not so the Mediterranean would become exceedingly salt.

The numerous ocean currents can best be studied from a map of the world on which they are distinctly marked.

Oceanography, the science which deals with the ocean, its tides, currents, composition, temperature, depth, salinity, deposits, vegetable and animal life, and all other aspects. While it has always been comparatively easy to observe the surface features of the ocean, the scientific investigation of the unseen depths is of recent date, but has advanced rapidly by the help of intricate and delicate instruments which have been devised for various purposes, *e.g.* for

taking SOUNDINGS, for recording temperatures and pressures and bringing up samples of water from different depths, and for measuring the speed and direction of currents. Nets of different kinds are used to trap the varieties of animals at all depths, and samples of the ocean floor can now be brought to the surface and studied. The most famous expedition for the observation of oceanic phenomena was that of H.M.S. *Challenger* (1872-1876), which circumnavigated the world and crossed and recrossed the oceans, recording innumerable observations and collecting enormous quantities of specimens. Since then numerous expeditions have been carried out by various European countries. The results of oceanography have supplied sailors with invaluable charts of soundings as well as information about tides and currents, meteorologists with important climatic data, and fishermen with facts about the food, distribution, and migration of fishes.

Oil-seeds, the fruits or seeds of a vast number of very different trees, shrubs, and plants, all of which yield oils which are used for the lubrication of machinery, the preparation of food, for lamp oils, and in the making of soap, candles, varnishes, etc. The most important oil-seeds are **COTTON** seeds, **COPRA**, **GROUND NUTS**, olives (from Mediterranean lands), palm nuts and kernels (from W. Africa), **SOYA BEANS**, sunflower seeds (from Russia), rape-seeds (from India) yielding *colza* oil, and sesame, a herb yielding an oil known in India as *gimjelly* or *til*.

Opium, a brownish, strongly scented, bitter drug, prepared from the juice of the seed-pod of the white poppy. In India, China, Asia Minor, and Persia, where the poppy is cultivated, opium is eaten or smoked to stimulate the faculties or to induce sleep. In India the drug is a Government monopoly. The finest quality is obtained from Asia Minor, which supplies Britain. By dissolving

opium in spirits of wine *laudanum* is obtained; the active principle of opium is known as *morphia*; both are employed in medicine to alleviate suffering.

Ordnance Survey. See MAP.

Outport. See PORT.

Oxbow Lake, water left in the abandoned meander of a river. Such lakes are found in the lower courses of rivers where they are flowing slowly through flat country. In their course they form many bends or meanders, the two ends of which may approach one another very closely. In a time of flood the river, instead of flowing round the meander, may cut across its neck and form a new channel. Owing to the deposit of silt at this point the meander may be cut off, forming a curved lake known as an oxbow.

Packet Station, a port of call for mail and passenger ships, such as Dover and Calais.

Paddy (Malayan *Padi*), the name given to growing rice and to the grain before the husks have been removed. In monsoon lands peoples store their rice as paddy, removing the husks only when the grain is to be used, in order that the nutritious flour round the grains may be preserved. See RICE.

Pam'paa, vast plains in Argentina, between 30° and 40° S. latitude, stretching from the Andes to the Atlantic. Formerly the bed of an ancient sea, they are covered, in their western part, by deposits of shingle and sand, and in the E. by estuary silt. The rainfall is scanty (10-15 in.), and occurs mainly in summer. The western area is mostly sterile, and is marked by large salty areas, brackish streams and lakes, and immense deserts. The eastern part is more fertile, and is covered by the typical pampas grass, tall and coarse-leaved, whose feathery spikes often attain a height of eight or nine feet. In this area alfalfa and other forage plants, which have been introduced by Euro-

peans, support enormous numbers of horses, cattle, and sheep.

Pampero (*pam-pä'rō*), a cold, south-westerly wind that sweeps across the pampas of Argentina to the Brazilian coast. It usually follows in the wake of a barometric depression, and is similar to the thunderstorms of our own climate in its sudden onset and its displacement for the time being of the more regular winds.

Paraguay Tea. See YERBA MATÉ.

Pass, a depression or *col* or *gap* in a mountain range by means of which communication may be carried on between the one side of the range and the other. Where mountain systems intervene between populous countries, as the Alps do, the passes are of great importance and roads are constructed, carefully planned so that the gradient shall not exceed a rise of *c.* 1 in 20. Railways are also constructed, climbing the valleys in a series of curves and loops, while the last part of the ascent is usually avoided by tunnelling under the pass.

Pathans (*pā-tānz'*), the name applied in India to the Afghans, especially those settled in India or on its N.W. frontier. They number *c.* 3,000,000, and consist of many tribes, the best known being the Afridis, the Ghilzais, and the Mohmands. They are of fine physique, but untrustworthy in character, being vain, greedy, treacherous, and revengeful. They have given much trouble to the British Government of India, and since 1850 have been the object of no fewer than fifty punitive expeditions. In religion they are Mohammedans.

Pearls, the spherical, pear-shaped, or irregular lustrous bead-like pieces of mother-of-pearl material secreted by various molluscs. These are formed as a protection round irritating substances, *e.g.* a grain of sand or parasite, which have entered the shell. Pearls are obtained principally from the pearl oyster of tropical seas, in depths averaging 7-8 fathoms, especially off N. Australia, in the Gulf of Manar, Persian Gulf, E. Indian Archi-

pelago, and Gulf of California; small pearls are found in mussels, *e.g.* in Scottish rivers. *Culture pearls* are obtained by the Chinese and Japanese, who introduce foreign substances into the pearl oyster to cause the formation of pearls. *Artificial pearls* are made by covering wax globules with a preparation of fish scales.

Pepper, a pungent spice, used to flavour food, made from the berries of a tropical climbing plant, native of S. India, Indo-China, and Malaya. It is exported to the U.K. chiefly from the Straits Settlements, Java, Siam, and French Indo-China, almost entirely through the port of Singapore. By quantity it is the most important spice imported by the U.K., where it is marketed either as whole berries, known as *pepper corns*, or as ground berries forming *black pepper* and *white pepper*, the latter made from berries which have been deprived of their outer coats. *Cayenne pepper*, or *red pepper*, consists of the ground pods of the capsicum plant, a native of S. America; the small pods of a variety of this plant are dried to form *chillies* which are used for pickling. See also PIMENTO.

Petroleum ('rock oil'), mineral oil, formed in the interior of the earth's crust by the compression of hydrogen and carbon from muds containing the remains of plants and animals. It is found most abundantly in U.S.A., Russia, Venezuela, Mexico, Persia, Romania, Dutch E. Indies, and Colombia. It may either flow freely or may be pumped from wells sunk deep in the ground. By distillation petroleum yields light oils, *e.g.* petrol or gasoline and paraffin, various lubricating oils, fuel oils, and a residue containing asphalt, wax (used for candles), etc.

Phosphates, chemical salts containing phosphorus, formed naturally or obtained from the bones of animals, and used as fertilizers. Natural phosphates occur most abundantly in Florida (U.S.A.), N. Africa, and Nauru and other islands of the Pacific Ocean.

Pimen'to, ALLSPICE, or JAMAICA PEPPER, the unripe, dried berries of a tropical shrub cultivated chiefly in Jamaica. It combines the flavours of several spices, and is used to flavour food. From the fruit oil of *pimento* is distilled.

Plain, an area of flat or gently undulating land at a low level, usually not more than 1,000 ft. in its highest part; but the prairie region of N. America, which rises gradually from e. to w. to a height of 6,000 ft., is generally called a plain. Most of the great rivers of the world flow through plains which they have built up with ALLUVIUM transported from their upper courses (e.g. R. Ganges), and under favourable conditions of climate such plains are usually very fertile. On some plains in the temperate latitudes grass is the chief form of vegetation, and these form good grazing areas. In the far north little vegetation grows on the level stretches, which are almost uninhabited. The great plain of the Sahara, owing to lack of rain, is infertile, except where oases occur. Plains are known by different names in different parts of the world, e.g. *Steppes*, *Prairies*, *Pampas*.

Plateau, or TABLELAND, an area of level, or mostly level, ground occurring at a considerable elevation. It may have rivers, and even mountain ranges, running across it (e.g. Spain), and may be very high (e.g. Tibet, 13,000 ft.). The borders of a plateau may rise quickly from sea-level (e.g. Asia Minor), or the plateau may be shut in by high mountains (e.g. Plateau of Pamir, Asia). A submarine plateau is a steeply bordered elevation in the sea floor.

Polder, the Dutch name for a piece of low-lying land reclaimed from the sea or from a lake. Such land is first surrounded by a dyke and then drained by pumping, if natural drainage is impossible. Polder land is usually very fertile, and suited for agriculture or grazing (e.g. Haarlem Lake, 70 sq. m.). A great scheme is

in progress to enclose and reclaim the greater part of the Zuider Zee, thus adding c. 850 sq. m. of fertile land to Holland.

Poles, a branch of the Slav race inhabiting Poland. Originally one of a number of tribes living between the Rs. Oder and Vistula, they eventually became predominant in that region. Their history has been very chequered, and their form of government has so often been changed that there has been little opportunity for the steady development of the people. The position of their country made it a battleground in the long strife between Teuton and Slav. Their forests were destroyed, their agricultural wealth confiscated, the peace of their country broken by marching armies, and their land itself divided in various ways among Germany, Russia, and Austria. After the Great War Poland became a free, self-governing state.

Porcupine Grass. See SPINIFEX.

Port, a town or place with a harbour, to which ships resort for the loading or unloading of goods. The most primitive are the *fishing ports*, established from the earliest times at convenient harbours along the coast. As ocean transport developed many of these harbours proved suitable for the larger vessels which came into use, and became of sufficient importance to be known as *seaports*. In many other cases the harbours had to be deepened and extended, or to be artificially protected by breakwaters. *River ports* are situated generally at the highest point to which the river can be navigated by vessels of a size suitable for transport. Ports for sea-going vessels situated far up rivers are preferable to those nearer the sea, as less railway transport is needed for their cargoes. The harbours of some seaports are not deep enough for the largest of modern vessels, and this has led to the creation of *outports*, at which these vessels discharge their cargoes into smaller vessels that can reach the original port. Thus Avonmouth has become the outport of

Bristol, and Tilbury of London. Sea-ports may serve special purposes along the ocean routes, as coaling or oiling stations, or as packet stations. With the development of aviation the term *Airport* has come into use, and is applied to an aerodrome on a recognized flying route, such as that between London and the Continent. These are usually situated at some easily accessible place near a great city, as Croydon at London.

Prairie, the vast tract of grassy plains in central N. America. In the United States they stretch from the foothills of the Rocky Mountains eastward to southern Michigan and western Ohio, and in Canada to near the Great Lakes. The prairie is not quite flat, but presents an undulating surface. Formerly it was almost treeless through the occurrence of prairie fires, but with the prevention of these, large areas of timbered ground are now being formed. The soil is generally productive, and where the rainfall is sufficient farming is carried on, the great wheat belt of Canada and the U.S.A. lying in this region. Near the Rocky Mountains, where the rainfall is scanty, sheep and cattle ranching replaces agriculture.

Precipitation, the fall from the atmosphere to the earth's surface of surplus water vapour in a condensed form, e.g. dew, mist, rain, snow, sleet, or hail, but chiefly in the form of rain. The term is also used to express the whole amount of water resulting from this fall for a given time on any area.

Pressure. See METEOROLOGY.

Projection, the method of representing the whole or a part of the earth on a flat surface. The earth can only be truly represented by a globe, but a globe showing details of all countries of the world would be excessively large. A map projection is really a means of showing in a convenient form the network of the lines of latitude and longitude on which the details may be traced from the globe. Various methods of projection are employed, all of them depending upon

the position of the observer's eye, as it is supposed to view through a transparent plane the part of the earth to be shown on the map. Since it is impossible to represent a curved body accurately on the flat, every projection must produce greater or less distortion either of size or shape, or of both, in the countries.

A very useful and common projection of the whole globe is *Mercator's*. In it the lines of latitude and longitude are both represented by sets of parallel straight lines drawn at right angles to each other. As the eye of the observer is supposed to be at the centre of the earth, and those lines are projected on a cylinder touching the earth at the equator, the parallels of latitude are farther and farther apart towards the poles, and meridians of longitude which should pass through the poles are all shown as straight lines. This results in very great distortion and exaggeration in the higher latitudes, but the projection is much used for sailors' charts, as they show true bearings of one place from another. Other projections are the *Orthographic*, *Stereographic*, *Globular*, and *Conical*, which cannot be easily understood apart from geometrical diagrams.

Pulses, a term applied to certain plants, e.g. pea, bean, lentil, producing pods of seeds which are used as food by man and domestic animals. Pulses are grown widely in the British Isles, and are also imported, usually preserved, from both temperate and tropical lands. Among these are SOYA BEANS, LOCUST BEANS, and GROUND NUTS.

Puna, lofty plateau in S. America, lying between the eastern and western divisions of the Andes in Peru, Bolivia, and Chile, at c. 11,000 ft. above sea-level. Cold and wind-swept, it is largely desert and scarcely habitable. The name is also applied to the intensely cold wind, the s.e. trade wind after crossing the E. Andes, which blows in this region at certain seasons.

Pygmies, people of diminutive

stature. The name is generally applied to such people inhabiting the equatorial forests of Africa. They are also called *Negrillos*, and except in stature have the general characteristics of the Negroes, though they are often lighter in colour and have a more rounded shape of head. The chief tribes are the Akkas of the Upper Welle, the Obongas of the Gabon, and the Batwas of the Congo. They represent a very low stage of culture.

Quebracho (*he-brá'chô*, 'break-axe'), a S. American tree yielding a very hard wood, which grows in N. Argentina and Paraguay. The wood is exported as logs, but is much more largely used in the production of an extract for the rapid tanning of cheap leather.

Quinine. See CINCHONA.

Races of Mankind. Mankind may be divided into a comparatively small number of groups or types, each with certain common characteristics, physical and mental. Many methods of classification have been suggested, chiefly according to colour of skin or hair or shape of skull. The classification most commonly accepted is that which reduces all the races of mankind to three primary types—the Black or Ethiopic, the Yellow or Mongolic, and the White or Caucasian.

THE BLACK OR ETHIOPIC DIVISION is found chiefly in Africa, and in the Malay Peninsula, the Andaman Islands, the Philippines, New Guinea, and Tasmania. People of this race are distinguished physically by black, woolly hair, scanty beard, dark brown to black skin, long narrow skull, thick projecting lips, and broad, flattened nose. In character they are pleasure-loving and fitful, passing easily from joy to sorrow. Their religion is a form of Nature and ancestor worship, and is often debased by witchcraft and human sacrifice.

THE YELLOW OR MONGOLIC DIVISION is distributed throughout the greater part of Tibet, China, Japan,

Korea, Formosa, Siberia, Indo-China, and the Malay Peninsula. In Europe they are found in Finland, Estonia, Hungary, and a great part of Russia. The American or Red Indians also belong to this stock. Distinguishing physical characteristics are straight, coarse black hair, scanty beard, yellow to brownish-yellow or copper-coloured skin, prominent cheek bones, small and narrow nose, and small, oblique, black eyes. The American Indians differ from the other branches of the race in greater stature and in shape of nose, which is generally large and aquiline. In temperament the Mongolic races are sluggish and morose, inclined to be indolent and lacking in initiative, but capable of great endurance under adverse conditions. In religion, except in America, the greater number are Buddhists and Mohammedans.

THE WHITE OR CAUCASIC DIVISION is distributed chiefly throughout Europe, N.E. Africa, Arabia, Persia, India, and Asia Minor. People of this race have wavy hair with full beards, skin varying from fair to olive or tawny in colour, skull long or oval in shape, nose large and straight or aquiline, cheek bones small and features regular. They are the most civilized of the races, and are enterprising and intellectual, having greater power of adjustment to their environment than others. Their religion, generally speaking, is of a purer and more ennobling type than that of the other races.

About the people of Polynesia, New Zealand, and Australia there has been much controversy, some including them under the Black or Ethiopic division, and others under the White or Caucasian division.

Radiation, the process by which any form of energy (e.g. heat) is emitted from a body. The sun sends out radiant energy, some of which comes in contact with the earth and is converted into heat. The heated surface of the earth then sends out invisible heat into the atmosphere by which the

lower layers are warmed, particularly when water vapour or clouds are present to prevent the rapid dispersion of this radiated heat. High ground loses heat by radiation more quickly than low ground, because the layers of atmosphere above it hold smaller quantities of water vapour. In deserts, where the atmosphere is very dry, temperature at night falls very rapidly owing to there being no blanket of water vapour or cloud to confine the radiated heat to the lower layers of air.

Rain, condensed atmospheric water vapour falling to earth as separate drops of water. CONDENSATION always requires some solid particle as a nucleus, and the centre of each rain-drop is a particle of atmospheric dust. So long as the particles can support their coating of moisture they remain in the air and form clouds or mist. When the coating of water becomes too heavy, or when several droplets join together, a raindrop falls.

Rainfall, the amount of rain which falls on a given area during a given time. This can be accurately measured by a RAIN GAUGE.

Well-marked types of rainfall are: (1) *Convictional*, in the equatorial belt of calms, particularly over the oceans, where highly heated saturated air rises, is cooled, and heavy rain falls daily, usually in the afternoon. (2) *Relief*. When moisture-bearing winds come to a range of mountains directly obstructing their path they are compelled to rise to a higher and therefore colder level in passing over the barrier. As cooling takes place rain falls, especially on the windward slopes, the leeward slopes receiving scanty supplies (e.g. w. Highlands of Scotland, s.e. Australia). (3) *Cyclonic*. Winds come in from all sides to fill up a centre of low pressure, are forced upwards, and rain occurs. Much of the rainfall of the E. of the British Isles is of this type.

Winds are the great moisture-carriers, and so a study of the World System of Winds will give in a general

way the distribution of rainfall over the world, viz.: at the equatorial calms there is heavy rainfall diminishing N. and S. to a minimum over the Horse Latitudes, which is followed by an increase towards latitude 50°, to be succeeded by a diminishing quantity towards the poles. The greater amount of the rainfall of any area may fall during a particular and sometimes a short season of the year. In Monsoon regions and in the interiors of continents practically all the rain falls in the *summer* of those regions, while in 'Mediterranean' regions (35°-40° N. and S.) a *winter* rainfall is predominant. In countries exposed to S.W. and N.W. variable winds rain falls throughout the whole year, winter being rather more rainy than the other seasons. This winter rainfall usually includes Snow.

The heaviest annual rainfall which has been measured (c. 500 in.) occurs at Cherrapunji, in the Khasi Hills, India; the driest known place is Copiapo, Chile, S. America.

Rain Gauge. See GAUGE, RAIN.

Raisins, dried grapes, exported chiefly from California, Australia, Asia Minor, and Spain (*muscatels*). From the seedless grapes of W. Asia Minor and its islands *sultanas* are produced. Still smaller seedless grapes, grown almost exclusively in the district near the isthmus of Corinth, are dried to form CURRANTS.

Ramie (*rām'ē*), or CHINA GRASS (Indian *Rhea*), the fine, strong, lustrous fibre prepared from the inner bark of two plants of the nettle family. The plants are natives of China, India, and Malaya, but are now cultivated also in Japan, Queensland, W. Africa, W. Indies, tropical Americas, and S. Europe. As the fibre is difficult to separate from the bark it is expensive. The silky fabric woven from it is made into light clothing by the Chinese; in industrial countries ramie is made into a wide variety of commodities, e.g. gas mantles, paper, ropes, canvas, and table linen.

Rattans or RATANS', the stems of

many kinds of climbing palms, *c.* one inch in diameter, found in tropical Asia and exported from Singapore. They are used locally for house-building in China, and for foot-bridges, cordage, and fishing-lines in the Malay Archipelago; in manufacturing countries they are employed in wicker-work, and as walking sticks.

Raw Materials, all commodities imported into an industrial country for the purpose of being manufactured. These include not only such products as wheat grain, bales of cotton, and iron ores, but also partly manufactured goods, *e.g.* wheat flour, wood-pulp, cotton yarns, which are to be further used by manufacturers.

Red Indians, aboriginal inhabitants of America. They were called Indians by the original discoverers of America, who believed the newly-discovered land to be near India. They are generally classed as a Mongolian people, as their general characteristics agree with those of the Yellow Race—their copper-coloured skin, lank black hair, high cheek bones, prominent noses, and large deep-set eyes. They are in general tall, but vary in stature and physique. The finest specimens are found among the Patagonians of S. America and the Iroquois, Pawnees, and Sioux of the United States and Canada. Formerly they were skilled hunters, keen observers of Nature and natural phenomena, with extraordinarily acute senses. In temperament they were impassive, and capable of enduring great hardships and even torture without any outward show of emotion. They were cruel and relentless to their foes without respect of age or sex. Through long contact with civilization many of these characteristics have been lost or weakened. There are numerous tribes of Indians, and throughout America some sixty different Indian languages are spoken. In N. America they live in reservations set apart for them, but are not confined to these.

Reef, a ridge of rocks which is usually covered by the sea but may

be visible when the tide is low. The most common are those formed by coralline deposit. See CORAL.

Refrigeration, a process by which foodstuffs can be kept in good condition for long periods of time by storing them in rooms or chambers maintained at a temperature below freezing point. By this means it is now possible to transport meat, fruit, etc., between the most distant parts of the world and through the heat of the tropics, and deliver it at its market in fresh condition. The overseas trade in frozen and chilled meat is now of very large dimensions, the chief countries engaged in it being Australia, New Zealand, the Argentine Republic, and other S. American states. *Chilled* meat is carried at a temperature of 30° F. and arrives at its market in soft condition, while *frozen* meat is carried at a temperature of 10° to 15° F., and must be thawed before it is used. Refrigeration is also used in the transport of poultry, fish, fruit, eggs, butter, cheese, etc. Thus English fish can be obtained fresh in the tropics, and in Rhodesia fresh fish, sent from Cape Town in blocks of ice, is sold.

Relief, the surface features of any part of the earth with regard to differences in elevation. Various plans are adopted in maps to show relief. A *Relief Map* is one on which the surface is actually raised on an exaggerated vertical scale. If this is photographed in a suitable light a *Photo Relief* map is produced, showing slopes by means of light and shade. *Contours*, *Hachures*, and the *Layer System* of colouring are also employed to represent relief. See MAP.

Ria (*rê'a*), a narrow bay or 'drowned valley' running into the land. When a subsidence of the earth's surface takes place along a mountainous coast where the mountains are not parallel to the sea, the lower parts of the river valleys are drowned and form rias (*e.g.* N.W. Spain, S.W. Ireland). These channels, unlike Fjords, deepen steadily towards the sea. Frequently their landward ends have branches

which receive as separate rivers what were formerly tributaries of that in the chief valley, and these branches usually form safe and sheltered anchorage for ships.

Rice, the principal grain crop of tropical and subtropical coast lands having heavy hot-season rains. While the plant is growing the soil must be covered with water, which is drained off just before harvest. Such conditions are most easily secured in river deltas, but may be obtained in suitable soils elsewhere by plentiful irrigation. Rice is grown most largely in the densely populated parts of China, India, Japan, Indo-China, Dutch E. Indies, Siam, and the Philippines, and the harvests are almost entirely consumed by the inhabitants. Only a small quantity enters the world's markets, chiefly from Burma, Indo-China, and Siam; and from these China is the largest importer. Rice is also grown in Africa (Egypt and Madagascar), s. U.S.A., S. America (especially Brazil), and Europe (Italy and Spain). A variety, known as *Upland* or *Hill Rice*, suited to drier soils, is cultivated on the terraced slopes of Ceylon and Java. For European and N. American markets the rice is husked and polished, making it less nutritious. See **PADDY**.

Rift Valley, a valley with steep walls formed by the sinking of a tract of land lying between two roughly parallel geological faults. Such valleys are long in proportion to their breadth. The chief example is the Great Rift Valley of E. Africa and Syria, stretching from Lake Tanganyika through Lakes Kivu, Edward, and Albert to Lake Rudolf, whence it runs through E. Abyssinia and the Red Sea to the Dead Sea and the R. Jordan. At Lake Rudolf it is joined by a branch which starts near the R. Zambezi and runs through Lake Nyasa. Other examples are the Central Lowlands of Scotland and the Rhine Valley between the Black Forest and the Vosges Mts.

River, a stream of fresh water flowing in a definite natural channel over the land from a higher to a lower level. A river may have its origin, or *source*, in a spring, a melting glacier, a lake, a marsh, or in a combination of tiny rills. On its way from its source to its *mouth* or entrance into a sea or lake a river gradually increases in size by the addition of other streams or *tributaries* which join it, the whole forming a *river system*. The path followed is called its *course*, and the total country drained by the river and its tributaries is its *drainage area* or **Basin**. When an observer looks downstream the *right bank* is on his right, the *left bank* on his left. Generally a river's course can be divided into three parts, the *upper* in hilly or mountainous land where the flow is torrential, the *middle* in undulating country where the flow is fairly fast, and the *lower*, near its mouth, where the country is flat and the flow is a smooth and gentle glide. In the more rapid portions of their courses rivers are continually at work carrying rock fragments and sediment, with whose help they deepen their beds and erode their banks. In their lower courses, where the current is slow, they deposit sediment and build up beds, sandbanks, **BARS**, or **DELTA**S. Some rivers which flow over hot, arid areas receive no tributaries, and lose so much water by evaporation that they finally disappear as rivers before reaching a lake or sea. Such rivers, and those which discharge into a lake which has no outlet, are said to flow through a region of *inland drainage*.

The longest river in the world is the Missouri-Mississippi (4,200 m.).

River Port. See **PORT**.

Roaring Forties. See **BRAVE WEST WINDS**.

Royal Burghs, certain towns in Scotland, such as Edinburgh, Perth, etc., which in mediæval times were founded and had certain rights conferred upon them by *royal charter*. One of the most important of these rights was the grant of a monopoly of

the trade in a particular district. At the time of the Union of Scotland and England in 1707 there were seventy of these burghs in existence, of which sixty-seven are recorded in the 1931 census.

Rubber, an elastic substance prepared from the milky juice or *latex* of many tropical trees, originally found in the forests of the Amazon basin, but now cultivated in plantations in Malaya, the Dutch E. Indies, Ceylon, India, Sarawak, Indo-China, and tropical Africa. When the trees are about five years old cuts are made through the bark, and the juice which flows from these is collected in small cups. The collected latex is treated with an acid which causes the rubber to become firm; it is then rolled out into thin sheets, and either hung up to dry as *cripe rubber* or dried with smoke as *sheet rubber*. In these forms it is exported. When treated with sulphur rubber loses its stickiness; the uses of this *vulcanized* rubber are innumerable. The best qualities of rubber are known as *Para* and *Ceara*, names derived from Brazil, the original source of supply. Between 60 and 70 per cent. of world production goes to U.S.A., over 25 per cent. to U.K., France, Germany, and Canada, and the rest to Japan, Russia, Italy, etc. *Gutta-percha*, a variety of rubber obtained from certain E. Indian islands, is used to cover telegraph cables; still another variety, *balata*, comes from British Guiana.

Sago, a starchy foodstuff prepared from the pith of certain tropical palm trees, natives of the E. Indies, and from another variety of palm in the W. Indies. It is imported into the U.K., chiefly from Singapore.

Salin'ity, the saltiness of the water in rivers, lakes, and oceans. River water is called fresh, but it contains a small amount of mineral salts dissolved from the land over which it flows. If a river flows through a lake, the lake water will also be very slightly saline. In the arid parts of the world certain

lakes into which rivers flow have no outlet to the sea. The surplus water is evaporated from the surface, but the mineral salts remain in the lake, causing its remaining water to become *brackish* or definitely salt. The Dead Sea, for example, has c. 25 per cent. of salts in solution, while sea water, which holds many substances in solution, especially common salt, has an average salinity of only $3\frac{1}{2}$ per cent. But the sea is not uniformly salt. Where evaporation is intense and rainfall is scanty the salinity increases (e.g. Mediterranean and Red Seas); where oceans receive much fresh water from rivers, rain, or melting ice the salinity decreases (e.g. Baltic, Equatorial, and Polar Seas).

Salt, a much-used and easily-prepared mineral product, obtained either from rock-salt mines or brine deposits, e.g. in Cheshire, or by the evaporation of sea-water, e.g. in Portugal. Only in wet tropical lands is there a shortage of salt, e.g. India; it is an important article of trade in the Sahara. The principal exporting countries are U.K., Spain, Germany, and Portugal. Salt is used for seasoning and preserving foods, and in the manufacture of washing soda, hydrochloric acid, etc.

Savan'na. See GRASSLANDS.

Sea Breezes. See LAND AND SEA BREEZES.

Sea-level, the level, or level agreed upon, from which heights and depths on the earth's surface are usually measured. Over the surface of the ocean generally there is much variation of level caused by winds, barometric pressure, and varying degrees of salinity. Mountains near the coast attract the sea, and where the coast region is high this raises the level of the sea. It is thus necessary to take a *mean sea-level* for the measurement of heights and depths. On the Ordnance Survey maps of Britain the datum level is the 'assumed mean level of the sea at Liverpool,' though this is lower than the average level round the country. On charts used for

navigation the datum level taken is the average level of low water at spring tides.

Seaport. See **PORT.**

Seasons, periods of the year during which different types of weather prevail, the differences being due to the annual movements of the earth round the sun. In temperate regions there are four: spring, summer, autumn, and winter. In monsoon countries these are usually reckoned: cold, rainy, and hot. In tropical areas there are frequently two rainy and two dry seasons.

Selvas, the dense forested plains of the river Amazon in S. America. Owing to the excessive rainfall and the high temperature in this region growth is rapid and continuous, there being no seasonal leaf fall and flowering time. So dense is the growth of vegetation that it presents an almost impenetrable barrier to communication and commerce. Characteristic trees are the palms, mimosa, figs, and bamboos around whose base grows dense underwood and climbing plants. The whole area presents the most wonderful variety of different types of vegetation to be found anywhere.

Shotts, shallow salt lakes found in N. Africa in the states of Algeria and Tunis. A line of them extends for about 250 m. over the plateau between the Tell Atlas Mountains on the north and the Sahara Atlas Mountains on the south, hence called the Plateau of the Shotts.

Sikhs (*sāks*), originally a religious sect founded in the 16th century in India, near Amritsar, which has ever since been the holy city of the Sikhs. In the 18th century, under Guru Govind, the Sikhs organized themselves as a military power, and ultimately possessed an army of some 120,000 men trained in European methods of warfare under French officers. In 1845 and again in 1848 they came into conflict with the British, and, after defeat, their country, the Punjab, was annexed. Since then the Sikhs have been most

loyal adherents of the British Crown, and rendered very helpful service during the Indian Mutiny. The Sikh is tall, well-built, and handsome, brave to the death, and submits readily to discipline. Loving war and adventure, many of them serve as soldiers in the Indian army. They also make excellent police, and are employed as such in several British colonies.

Silk, the very fine, soft, glossy threads spun round themselves for protection by certain kinds of caterpillars (the so-called silk-worms) in their chrysalis stage previous to their transformation into moths. The silky cases or cocoons thus formed are placed in very hot ovens or in dry steam to kill the chrysalis, after which the silk is unwound or 'reeled,' mostly by machines. One cocoon yields c. 400 yards of extremely fine thread, and 10 lb. of cocoons furnish about 1 lb. of raw silk. From 5 to 7 of these threads are twisted together to form the best silk thread of commerce; for coarser qualities up to 20 threads are required. The principal producing countries are China, Japan, India, Indo-China, Italy, and France, all of which have sufficiently hot climates for the silk-worms, and grow abundantly the mulberry trees of which the leaves form their favourite food, and also have an adequate supply of relatively cheap yet skilled labour to produce and prepare the thread at low cost. The chief manufacturing countries are U.S.A., France, Italy, and Switzerland, and Lyons, Krefeld, Zurich, and Basle are specially noted for the manufacture of satins and velvets. *Artificial silk*, or *rayon*, is prepared from cotton wool, sawdust, or wood-pulp. From these cheap raw materials liquid cellulose is chemically prepared and squeezed through very narrow glass tubes. From them it emerges as long, thin threads which are spun and woven in the same manner as real silk. Artificial silk is now produced in enormous quantities in the industrial countries of Europe and N. America.

Silt. See **ALLUVIUM**.

Simoom', an intensely hot, dry, and suffocating whirlwind which blows chiefly in spring and summer in the Saharan, Arabian, and Baluchistan desert areas. It usually raises columns of sand, which sometimes overwhelm caravans and modify the form of the sand-dunes in its path.

Sirocco, or **Scirocco** (*sir-oh'ō*), a hot southerly wind experienced on the African coast of the Mediterranean Sea, and also in Sicily, southern Italy, Malta, and Greece. In southern Italy and Greece it is very hot (sometimes 110° F.) and dry, but as it passes northward it gathers moisture.

Sisal, the fibre obtained from the leaves of sisal hemp or *henequen*, a variety of agave native to the arid, rocky soils of Yucatan, but now cultivated in Tanganyika Territory and elsewhere. It ranks next after manila hemp in the making of ropes and twine.

Slavs, one of the chief divisions of the Aryan race, forming the majority of the population of Europe. The original home of the Slavs was in the district N.E. of the Carpathian Mountains in the valleys of the Rs. Vistula, Pripiet, and Dniester. From there they have spread over eastern Europe, and are represented now by the Russians, the Bulgarians, the Serbo-Croats and Slovenes of Yugoslavia, the Kashubes north-west of Danzig, the Poles, and the Czechs, Moravians, and Slovaks of Czechoslovakia. In all there are probably c. 150,000,000 Slavs in Europe. In general the Slav is broad-headed, short of stature, and of pale white to swarthy colour.

Snow, one of the forms of condensed atmospheric water vapour which falls to earth. When moisture is condensed at a temperature below freezing point it is changed into ice crystals, groups of which form snowflakes. When the moisture is formed into drops before freezing it falls as hail, each hailstone consisting of several coats of frozen moisture.

Snowline, the limit of altitude above

which perpetual snow lies, or below which all the fresh snow of winter is melted during the summer. This limit varies in different places, depending on latitude, steepness of slope, the amount of snowfall, and exposure to rain-bearing winds and the sun's rays. Near the equator the snowline is c. 18,000 ft. above sea-level, but in Spitzbergen it practically coincides with sea-level. In the Alps it is higher on the south side than on the north.

Soil, the loose material, primarily resulting from the decay of rocks, into which the roots of plants penetrate, and from which they derive moisture and food. Soils either lie upon the rock from which they have been formed, or are transported from a distance by running water, or by glaciers, or by the wind. The fertility of a soil depends chiefly on the nature of the particles of which it is composed, a sufficiency of plant food, and suitable climatic conditions. The particles composing it may be fine or coarse, and either porous or tenacious of water. In addition to such mineral particles soils must contain organic matter, mainly derived from decayed vegetable substances. This is known as *humus*, and not only contains plant food but helps to retain moisture in the soil. Where soil is continually cropped its stores of plant food become exhausted, and some means must be employed for the preservation of its fertility, either by the rotation of the crops grown, or by allowing it to lie fallow for a time, or by the use of fertilizers.

Solar System, the sun, and the planets with their satellites or moons which revolve round the sun, controlled in their courses by its gravitation. The planet nearest to the sun is Mercury (35,900,000 miles); that farthest distant is Pluto (discovered 1930; c. 3,800,000,000 miles); between these are Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. The Earth with its satellite, the moon, is at an average distance of

92,870,000 miles from the sun. The diameter of the sun is 864,000 miles, or about 35 times that of the earth; its mass is equal to 332,000 earths. The sun radiates heat and light to the planets.

Solar Time. See TIME.

Solstice (*sol'stis*), the time in summer or winter when the sun, through the annual revolution of the earth, is vertical at its farthest distance N. or S. of the equator ($23\frac{1}{2}^{\circ}$) and for a few days before moving in the reverse direction seems to stand still. In the N. hemisphere the *summer* solstice occurs c. 22nd June, which is the winter solstice in the S. hemisphere, and the *winter* solstice c. 22nd December, which is the summer solstice in the S. hemisphere.

Sounding, the process of finding out the depth of the sea. When the sea is fairly shallow a piece of lead weighing 7 lb. or more and attached to a rope marked at regular intervals is dropped overboard a vessel. When the lead strikes the bottom the shock is usually felt, and the length of line run out gives the depth. To sound great depths a steel wire with heavy sinkers is used, and there is a device by which the leads are detached on striking bottom. The most recent method of measurement is by *echo sounding*. A sound produced at the surface travels through water at a known rate. The time taken for such a sound to travel to the bottom and its echo to be reflected back to the surface is carefully noted, and from this the depth is accurately calculated. From the results of soundings seamen's CHARTS are constructed.

Soy's Bean, or SOJA, or SOY, a leguminous plant, one of the PULSES, yielding a bean resembling a green pea, which is used for human food in E. Asia and for animal fodder in Europe and U.S.A. The plant thrives wherever maize or cotton can be grown, but its value was not realized in the U.K. till 1908, when the first shipment arrived at Hull from Manchuria, still the principal source of

supply. Japan and S. China are large importers. The beans are rich in oil, and after the oil has been expressed, the residue forms a valuable cattle-food and fertilizer. See OIL-SEEDS.

Spices, fragrant or pungent products, obtained almost entirely from tropical plants, and employed to flavour foods. The principal spices of British commerce are pepper, ginger, cloves, and cinnamon (see separate articles). The very high value of spices in 16th-century England was due to the difficulties and dangers of the long voyages round the Cape of Good Hope; and one reason for the formation of the E. India Co. was the Dutch monopoly which raised the price of pepper from 3s. to 6s. per lb. Shakespeare mentions mace, nutmegs, and ginger as spices well known in Elizabethan England.

Spinifex, the name applied to two groups of thorny, salt-loving grasses which grow in arid parts of Australia. In the one group is *Hairy Spinifex* or *Spiny Rolling Grass*, which is found in S.E. Asia, Australasia, and the Pacific Islands, where it serves to bind the sand. The other group includes *Porcupine Grass*, also a sand-binder, which grows in round, isolated hummocks, 1 to 3 ft. high, formed of dense masses of needle-like prickles; above these rise blades of very coarse grass, sometimes 6 ft. high, which cause sores on the legs of camels and horses. When in seed the grass forms a food for horses; at other stages it is useless, except to kangaroos and rats, which feed on its roots. This plant is found over about one-third of Australia.

Spring Tides. See TIDES.

Stalactites and **Stalagmites.** See KARST.

Steppes. See GRASSLANDS.

Strath, Scottish name for a broad river valley. See VALLEY.

Sudd, a floating mass of vegetable matter that forms in the Upper Nile and obstructs navigation. It is composed of plants which cover the swamps on either side of the river.

When such plants are loosened and reach the main channel of the river they often lodge on some obstruction and form a dam or floating island, sometimes 25 m. in length and 20 ft. in thickness. In 1900-4 much of the sudd was removed and freedom of navigation secured.

Sugar, the sweet substance extracted from the stems of the sugar-cane and the root of sugar-beet. The *sugar-cane*, a native of E. Asia, now cultivated throughout the tropics, is a member of the grass family. It grows on moist soils in tropical and subtropical countries, its stems rising to 10 or 12 ft. The canes are crushed between rollers to obtain the juice, which is boiled. As it cools, the crystals separate out and form *raw sugar*; the thick syrup remaining is known as *molasses*, and from this *rum* is distilled, principally in the W. Indies. The raw sugar is refined in importing countries, e.g. U.K., and the by-products of *syrup* and *treacle* are obtained. The largest producers of cane-sugar are Cuba, India, Java, Brazil, Sandwich Islands, Philippines, and Porto Rico. The *sugar-beet*, a white variety of beetroot, is an annual plant widely cultivated in temperate Europe and U.S.A. The turnip-like roots are washed and passed through machines which reduce them to pulp. The juice is crystallized by boiling, and is then known as beet sugar. The principal producing lands are Germany, Czechoslovakia, France, Poland, U.S.S.R., U.S.A., Belgium, and Holland; the world production is more than half that of cane-sugar. In India some sugar is obtained from certain palm trees; in Canada some is made from the sap of the maple tree, obtained by tapping the tree.

Swahili (*swā-hē-lē*), the native inhabitants of Zanzibar and the coast lands opposite. They are of mixed Negro and Arab blood, and in colour range from pure black to tawny. They are a tall, strong, and handsome people, and owing to their intelligence and enterprise are in great demand

in Central Africa as porters. Their language, Kiswahili, is one of the Bantu group of languages, and is widely used as a trade language.

Tableland. See PLATEAU.

Taiga (*tī-gā*), irregular belts of coniferous forest land in the N. hemisphere. These lie S. of the TUNDRA, and much of the land becomes flooded in spring by water from the head-streams of north-flowing rivers whose lower courses are still ice-bound. This renders the timber useless for commercial purposes. Population is scanty. Hunting and trapping furbearing animals are the chief occupations.

Tapioca. See CASSAVA.

Tariffs, duties imposed on foreign goods imported into a country either as a means of raising revenue for the Government, or for protecting its own manufactures from competition by those of other countries; also known as customs duties.

Tea, the cured leaves of the tea plant, a hardy, subtropical shrub, possibly native to Assam, which grows on the rich soils of well-drained mountain slopes in lands of hot-season rainfall. The leaves are picked by hand several times each year, the earliest picking yielding the best tea. After being sun-dried the leaves are rolled, and allowed to ferment in order to reduce the quantity of *tannin* they contain. They are again dried, and exported as *black tea*; in *green tea* no fermentation has taken place. The principal producing lands are China, India, Ceylon, the Dutch E. Indies (especially Java), and Japan. India and Ceylon are the largest exporters to the U.K., which is the chief importer; Japan sends green tea to the U.S.A.; from China *brick tea*, made by mixing inferior leaves, stalks, and dust with rice paste, is exported to the U.S.S.R., which also buys *tea-tablets* of the finest tea-dust compressed by machinery. Tea was first introduced into England in 1665, when it cost £3 per lb.; the consumption per head is

largest in Australia, New Zealand, and the U.K.

Temperature, the degree of heat possessed by a body. This is measured by a THERMOMETER. On the earth's surface there is a steady diminution of temperature from the equator towards the poles. The slope of the land, nearness to the sea, the direction of mountain chains, the direction of prevailing winds, the nature of the soil, and the quantity of vegetation also modify land temperatures. Temperature decreases with altitude at the rate of $c. 3^{\circ} F.$ for every 1,000 ft. of ascent. The difference between the hottest and coldest part of a day is called the *Daily Range of Temperature*, while the difference between the average temperature of the hottest and coldest months is the *Annual Range*. See ISOTHERM.

Terrace Cultivation, a method of cultivating barren and steep hillsides. The slopes are cut into terraces which rise like stairs above one another. Walls from 5 to 15 ft. high are built round these patches, to retain moisture and prevent the soil which may have been carried to the fields from the valleys from being washed away. Such terraces are easily irrigated by mountain streams or artificially, and are common where cultivable land is scarce and rainfall irregular. By this method good crops are raised in parts of Arabia and the hilly regions of India, Ceylon, China, Spain, Italy, etc.

Thermometer, an instrument for measuring temperature. It consists of a glass tube of very fine, uniform bore, at one end of which is a bulb. Mercury, or some other liquid which expands with heat and contracts with cold, fills the bulb and a portion of the stem. On the stem is a graduated scale of units, called *degrees*, the two fixed points marking the freezing and boiling points of water. On the Fahrenheit thermometer freezing point is 32° and boiling point is 212° . On the Centigrade scale, mostly used for scientific purposes, these points are 0° and 100° .

Tides, the alternate rise and fall of the waters of the ocean twice in the course of nearly twenty-five hours. The rise is called the *flood*, and the fall the *ebb*. Tides are caused by the gravitational force exerted by the moon, and to a lesser degree the sun, on the earth. The tides do not always rise to the same height. At the time of new or of full moon, when the sun and moon are in a straight line with the earth, the tides rise higher and are then known as *spring tides*. Midway between new and full moon, when the sun and the moon are at right angles as to their direction from the earth, tides are at their lowest height and are then called *neap tides*. When a long and narrowing river estuary is subject to tides, the flood causes a Bore, which in turn causes exceptionally high tides far up the estuary. Thus, on the Severn, the bore has been known to cause at Chepstow, on the Wye, a tidal range of 47 ft. Where the tidal current rushes through a narrow channel we get what is called a *race*, as at Alderney in the Channel Islands, and if the channel be irregular may cause violent whirlpools such as the Maelstrom off the Lofoten Islands. Inland seas, like the Mediterranean, have a very small tidal range. The times at which high and low water occur vary from day to day, being about 50 minutes later each day; thus if it is high tide at 12 noon, it will be high water again about 25 minutes after midnight, and again the next day about 12.50 p.m. Low water occurs about half-way between two high waters.

Till. See GLACIER.

Time. The movements of the earth, or the apparent movements of the sun, are the standards by which we measure time. The *solar day*, or the time between midday and midday, is divided into hours, minutes, and seconds. All places on the same meridian A have the same *solar time*, i.e. noon occurs at the same time at all parts of the line, but, owing to the rotation of the earth from west to east, places

that lie to the east or west of this line have a different solar time. Thus a place to the east of A will have the sun overhead at noon earlier than A, so that clock-time there will be ahead of clock-time at A; a place to the west of A will similarly have its clock-time behind that of A. As the earth rotates through 360° in 24 hours, there is a difference of 4 minutes of time for each degree of longitude. Thus the *local time* of any place on the earth's surface with reference to any other place can easily be calculated. In order to avoid the confusion of a number of places within a certain range of longitude keeping each its own local time, the local time of one convenient meridian of longitude is adopted for the whole range, and is known as the *standard time* for that area.

Tinplate, thin sheets of iron or steel coated with tin to protect them from rusting. Tinplates are most largely produced in the industrial centres of the s. Wales coalfield at Swansea and Cardiff. In the U.K. tinplate is made into biscuit tins, etc.; it is also exported, especially to the Americas and British Dominions, to be used in the form of containers in the meat, fruit, fish, and vegetable canning industries.

Tobacco, the prepared leaves of certain plants, native of the Americas, used for smoking or chewing, and, in the form of powder, for snuffing. The plant may be cultivated in both tropical and temperate lands, but the finest leaves are grown in Cuba, where they are made into cigars. The U.S.A. grows by far the largest tobacco crop. Tobaccos are named from their lands of origin, e.g. Virginian, Turkish, Egyptian, etc., and are blended to make smoking mixtures and cigarettes. Empire tobaccos come principally from N. and S. Rhodesia, Nyasaland, India, and British N. Borneo.

Tonnage, name used to indicate the carrying capacity of a vessel, and not the weight of the vessel itself.

Torna'do. See WHIRLWIND.

Towns, places where people congregate and live in houses either for

social reasons, for mutual defence, or for convenience of trade. Where the number of people is small they are known as villages; where they are very large and the towns consequently important they may be called cities. Their position has generally been determined by a number of different factors. In Europe in the Middle Ages castles were erected by kings or nobles, and round these grew up towns which looked to the lord of the castle for protection, as at Stirling and Carnarvon. Towns also grew up round the great cathedrals, as at Durham. As trade developed, market towns arose where routes converged, but with greater facilities for transport lost much of their importance. As mining developed, mining towns arose in the mineral areas. With the development of manufactures came the rise of manufacturing towns, situated where most convenient for raw material, coal, or distribution of goods. Other special considerations may determine the site of a town, so that we find towns built at the end of a pass (Bologna), at important fords or bridges (Oxford and London), at the head of deltas or on one of their distributaries (New Orleans and Calcutta), at the head of navigation on a river (Montreal), at the junction of rivers (Allahabad), or where falls and rapids occur (Minneapolis). See also PORT.

Trade Routes. The early *land routes* of trade were *caravan* routes from E. and s. Asia, and across the Sahara, to the markets of s. Europe. Many of these are still used, but some have been superseded, in parts, by *railways*, e.g. Baghdad Rly., while others are developing into *motor routes*, e.g. between Damascus and Baghdad. The early *sea routes* were through the Mediterranean and Red Seas, or mainly *coasting* routes along the shores of the Old World. At a later period sailing routes, adapted to the winds, were more important. At present the busiest routes are those of the *steamship*, following arcs of GREAT CIRCLES

whenever possible, but requiring fuelling stations, and utilizing ship canals. For the rapid transport of mails, passengers, and light freight, Air Routes are now increasingly followed.

Trade Winds, constant winds, roughly between latitudes 30° N. and 30° S., that blow towards the equatorial region of calms or the Doldrums, and so called because of their regularity and consequent value to navigators. Heated and moisture-laden air from the torrid zone rises upwards and flows off towards the poles, and cooler air from regions north and south of the equator flows in along the surface to take its place. If the earth were at rest a north wind would prevail north of the Doldrums and a south wind to the south, but the earth's rotation being most rapid at the equator, deflects these winds to the west, causing them to be north-easterly in the N. hemisphere and south-easterly in the S. hemisphere.

Train Ferry, a means of transport by which railway trains are carried across stretches of water, generally too wide for bridging, on vessels with rails on their decks. This saves the time required for the transfer of goods between train and ship, and is important where perishable goods are concerned or where a quick passenger service is considered essential.

Transport. The most primitive form of land transport is the carriage of goods by human porters, still common in tropical Africa and in monsoon Asia, where men also draw or push vehicles containing commodities. Animal transport is the most widely employed form, the beasts of burden most generally employed being the horse, the mule, the ass, and the ox; in dry deserts the camel; in S. America the llama; in Tibet the yak; in India the elephant; and in tundra lands the reindeer and dog (husky). Such animals may either carry the goods, e.g. pack-horse, or draw vehicles, much heavier loads being transported by the latter

method, but the use of vehicles necessitates the laying of roads. In the late 18th century came the cutting of canals in Britain, especially for the cheap transport of coal. In the 19th century the invention of the steam and later of the electric locomotive brought about the railway age. The employment of motor vehicles has greatly increased the importance of road transport. Water carriage developed from simple rafts and boats propelled by oars to the sailing vessel, and later to the steamship driven by coal or oil; and a more recent development is the use of ships driven by motor or internal combustion engines. Air transport is still in its experimental stages, but mails are already being carried by aeroplane to India and S. Africa, as well as over many parts of Europe and America. In Australia there are regular air lines for the service of districts remote from railways. See TRADE ROUTES.

Treaty Ports. Certain Chinese ports which are open to international commerce are so called. Till the middle of the 19th century foreigners were allowed to trade at various Chinese ports, but under no formal permission. In 1842 trouble which arose at Canton in connection with the trade in opium led to a war between Britain and China in which the Chinese were defeated. By the treaty which followed, five ports—Canton, Amoy, Fuchow, Ningpo, and Shanghai—were thrown open to foreign trade. Since then, at various times, other ports have also been made available for foreigners, and there are now more than forty such ports.

Tropics ('turning points'), parallels of latitude $23\frac{1}{2}^{\circ}$ N. (*Tropic of Cancer*) and $23\frac{1}{2}^{\circ}$ S. (*Tropic of Capricorn*) of the equator. They mark the northern and southern limits of places on the earth that receive vertical rays from the sun at noon. The sun reaches Cancer c. 22nd June, our Summer Solstice; and Capricorn, our Winter Solstice, c. 22nd December; and appears to turn back after some days.

Hence the name Tropic. The name Tropics is also used to mean the whole area between the tropical lines, or the Torrid Zone.

Tsetse Fly (*tset'si*). About twenty kinds of tropical African blood-sucking flies are so named. The most common is slightly larger than the ordinary house-fly, and has a protruding mouth through which poisons pass into animals or men bitten by the insect. The bite of certain tsetse flies is fatal to domesticated animals; that of others infects human beings with the deadly *sleeping-sickness*; and still others spread less fatal diseases. The principal method of getting rid of the fly is to clear away the low vegetation among which the young develop. Tsetse flies are most troublesome in the lowlands of Tanganyika Territory, N. Rhodesia, and Nyasaland.

Tuareg, or **TAWAREK**, a nomadic Berber race living in central and western Sahara. Of s. European type, they are reddish-yellow in colour, have long, black, silky hair, and are tall and muscular in build. They are known to the Arabs as the 'veiled' people, from the fact that the men wear a veil day and night, though the women never do. Averse to manual labour, the Tuareg live by convoying caravans of traders, by raiding unprotected traders, sometimes by plundering Arab settlements. Formerly Christian, they are now Mohammedan in religion.

Tundra (*toon'drū*), swampy, low-lying lands in the n. hemisphere, round the shores of the Arctic Ocean. In winter the ground is snow-covered and frozen, but during the short summer mosses, lichens, and some stunted herbage and flowering plants appear. The tundra is a grazing ground for reindeer and caribou, and supports a scanty population of nomadic tribes who live by hunting and fishing.

Turks, an important people of Tatar origin, widely distributed throughout Asia and s.e. Europe, being found from the banks of the R.

Lena on the east to the Bosphorus in Europe. The most important branch is that which founded the Ottoman Empire in Asia Minor and s.e. Europe. Their first invasion of Europe took place in 1355, and their capture of Constantinople in 1453 marked an epoch in European history. As a people the Turks are industrious, sober, and brave, and are Mohammedans in religion. Other branches of the race include Yakuts, Kirghiz, and Turkomans.

Typhoon (*ti-foon*). See WHIRLWIND.

Urban District, a district in a county which by reason of increase of population has acquired the character of a town but has not yet become a municipal corporation. These areas are proclaimed as such by special legislation or by orders of the Government Department concerned with county and local administration.

Valley, a long stretch of low land between two ridges of higher ground and with a fairly regular downward slope. Usually a valley has been carved out from the surrounding country by the river which traverses it. A valley which has been carved out by a glacier is U-shaped in section, while one produced by a river is more V-shaped. *Longitudinal* valleys run between and parallel to mountain ranges; *transverse* valleys cut across ranges; *lateral* valleys are those caused by the tributaries of the river flowing in a longitudinal valley. See CAÑON, CARSE, COOMB, GLEN, RIA, RIFT VALLEY, STRATH.

Valo'nia, the acorn-cups of the Mediterranean oak, imported into the U.K., mainly from Smyrna, for use in tanning, dyeing, and making ink.

Veld (*velf*), a name applied in the Transvaal, S. Africa, to more or less elevated grassy plains which form part of the great S. African plateau. It is divided into (1) the High Veld, stretching east and west across the southern Transvaal; (2) the Middle or

Bush Veld in the north; and (3) the Low Veld in the east. It varies in height from 6,000 to 3,000 ft. above sea-level, and consists generally of rolling, grass-covered, treeless downs.

Vicuña (*vi-hoo'nyā*), a small, undomesticated member of the camel family found at altitudes of over 13,000 ft. on the plateaus of the Andes. It is hunted for its fine wool, of which only small quantities are available for the world's markets.

Volcā'no, an opening in the earth's crust through which molten rock or lava, rock fragments, ashes, and steam are ejected from the hot interior. The ejection of material is called an *eruption*. The material forms a cone-shaped hill or mountain round the opening, with a *crater* or cup at the summit. Some of the lava may fill cracks or fissures in the walls of the volcano or underground, and when it cools and hardens it is known as a **DYKE**. *Pumice stone* is the solidified froth or scum of lava. The supposed flame of a volcano is merely the reflection of the red-hot rock within the crater on a cloud of vapour which forms above the mountain. At the base of some volcanic cones *sulphur* is found (Mt. Etna in Sicily). Volcanoes may be *extinct*, *dormant* (liable to break out), or *active*. The chief centre of volcanic activity is the line of weakness in the earth's crust surrounding the Pacific Ocean. Familiar examples of volcanic mountains are Vesuvius (Italy), Fujiyama (Japan), and the Peak of Teneriffe (Canary Islands).

Wallace's Line, a line passing N.E. between the islands of Bali and Lombok in the E. Indies, thence through the Strait of Macassar between Borneo and Celebes, and finally S.E. of the Philippine Islands. To the west of this line flora and fauna are of distinctly Asiatic character, while to the east and south Australian elements are predominant. This shows that the islands west of this line must at one time have formed

part of the mainland of Asia, from which they were detached by subsidence, while those to the east formed part of the Australian mainland. Wallace's line indicates the deep channel which must have separated these continents in remote times. It is so called after Alfred Russel Wallace, the famous scientist, who first defined its course in his *Island Life* (1880).

Waterfall, or **CASCADE** or **CATARACT**, a sudden descent of water in the current of a river. Waterfalls are naturally commonest in a mountainous country, but some of the finest, such as the Niagara Falls on the St. Lawrence R., or the Victoria Falls on the Zambesi R., are in relatively flat country. This is due to rock strata of different degrees of hardness in the bed of the stream lying horizontally or dipping up-stream. When a hard layer lies over softer rock, the latter is more rapidly worn away, and a step or terrace formation results. As the hard layer also wears away, but more slowly, the position of the fall gradually moves up-stream, and a gorge is formed below it. The word '*cascade*' is often reserved for falls where the descent is made in a series of steps. *Rapids* are formed where these steps are small in height. Waterfalls interrupt navigation, but may be invaluable as a source of water power.

Water Power, energy derived from natural or artificial waterfalls, used directly for driving machinery by turning a water-wheel or turbine, or indirectly through electricity generated in dynamos worked by turbines.

Watershed, the slope down which a stream flows. The high ground separating two watersheds is called the *water parting* or *divide*, but in many cases the divide is really a level stretch of boggy ground from which water flows out at both sides. Such ground may occupy the highest part of a pass, as in the Great Divide of the Rocky Mountains in Canada.

Wattle, several kinds of Australian acacia varying in size from shrubs (e.g. mulga) to forest trees (e.g. iron-

wood). The bark of several varieties is valuable for tanning, and some of these, particularly the *black wattle*, have been introduced into Natal. The trees were called *wattles* because their long, pliant branches were used by early settlers to form the framework of their 'wattle-and-daub' huts.

Weather, the atmospheric conditions for a particular day, week, month, season, or year, as distinguished from **CLIMATE**, which takes account of the average conditions over the longest period under observation. See **METEOROLOGY**.

Weathering, the change produced on rocks by the action of the atmosphere, frost, and rain. See **DENUATION**.

Wheat, one of the most important cereals, a member of the family of grasses. It is cultivated principally in temperate lands, but is grown also in lands of subtropical and tropical climates. The largest producers are the U.S.A., Canada, India, U.S.S.R., France, and Italy. The U.K., which produces less than one quarter of the wheat required by its population, is the largest importer, and, like Italy and Germany, purchases largely from Canada, U.S.A., Argentina, and Australia.

Whirlwind, a column of air rotating rapidly round its own vertical axis and at the same time moving forward with great speed. It is due to an atmospheric disturbance over a small area produced by a quick change in temperature and pressure. A whirlwind frequently assumes the shape of a long, narrow funnel, and is violent and destructive, but usually dies away before travelling very far. The chief whirlwinds are: the *typhoon*, which blows during August, September, and October over the China Sea; the *hurricane*, often experienced in the West Indies; the *tornado*, which occurs in the Mississippi Valley.

Wind, air moving more or less horizontally from a high-pressure area to a low-pressure area. A wind is always named from the direction in which it

starts (e.g. a *west wind* is one which blows from the west). The rate of movement, or *force*, is measured in miles per hour, and may vary from a calm to over 100 miles per hour. Some winds are *constant*, or blow steadily all the year round in one direction (e.g. trade winds); others blow in particular places (e.g. *harmattan*), or at certain seasons (e.g. *monsoon*), or at a certain time of the day (e.g. land and sea breezes). See **METEOROLOGY**, **TRADE WINDS**, **MONSOON**, **TRADE WINDS**, **WHIRLWIND**.

Wine, the fermented juice of the fruit of the vine (grapes), used as a beverage as far back as historical records extend. The original home of the vine appears to have been in W. Asia or S.E. Europe; it thrives in lands of long, hot, sunny summers followed by warm autumns; its long roots favour its cultivation in 'Mediterranean' climates. France holds the first place for the quantity, the quality, and the variety of its wines (e.g. *claret*, *burgundy*, *champagne*), each of which comes from a different district. Italian wines, in quantity not far behind French, are not in so great demand abroad; Spanish *sherry* and Portuguese *port* are largely exported; other well-known wines are *Tokay* (Hungary) and *Moselle* (Germany). British Empire wines from Australia and S. Africa are now marketed in increasing quantity in the U.K. The spirit of wine is distilled as *brandy*, of which the finest quality comes from Cognac (France).

Wood-pulp, a material prepared from soft-wooded trees (e.g. spruce, fir, pine, hemlock), increasingly employed in the making of paper since its introduction about 1880. *Mechanical wood-pulp* is prepared by reducing the wood to pulp on grindstones; its inferior quality makes it suitable for only cheap papers (e.g. newsprint). *Chemical pulp* made by treating small chips of wood with soda, sodium sulphate, or sulphurous acid and lime or magnesia, yields finer and stronger pulp. The principal producing coun-

tries are Canada, U.S.A., Sweden, and Finland.

Wool, the hairy covering of many animals, particularly the sheep, goat, llama, alpaca, vicuña, and camel. Sheep thrive on the grasslands of cool, dry climates; goats are reared on mountain slopes. The principal sources of sheep wool, of which *merino* is the finest, are Australia, Argentina, U.S.A., S. Africa, and New Zealand. The scoured wool is spun into yarn before being woven into cloth. The grease that is removed by washing the wool, known as *lanoline*, is used in making toilet soaps. Of goat wools, *mohair* is exported from S. Africa, and *cashmere*, the fine undercoat of the Kashmir goat, from Himalayan lands. *Camel's hair* comes from China and Turkestan. France, U.K., U.S.A., and Germany are the largest importers of wool.

Yak, a large kind of ox or bison, with long hair hanging from its lower body, found wild in Tibet, where it is also domesticated as a sure-footed beast of burden. Its wool is made into clothing, and the cow yields milk.

Yer'ba Maté (*máté*), or **MATÉ**, or **PARAGUAY TEA**, the prepared leaves of a small tree of the holly family which grows wild, and is also cultivated in plantations in tropical and subtropical S. America. From the leaves a beverage is prepared like tea, which has a stimulating effect on fatigued persons, and is much used in S. American countries.

Zones. See **BELTS**.

Zulus, a S. African native people, one of the branches of the **BANTU** race, living in the N.E. part of Natal. Physically they are a fine race, and in character are brave and warlike, intelligent and independent. They live mainly by cattle farming, and such arts as they have developed are very primitive. They care little for trading. In the early 19th century, under their great chief Chaka, they developed into a warrior nation, establishing complete supremacy over other native races from Cape Colony to the Zambezi. Though their warlike proclivities have been much curtailed since their defeat by the British in 1879, they still retain a strong sense of nationality.

STATISTICS OF THE

	Area in Sq. Miles.	Pop. in 1,000's.
BRITISH ISLES :		
England and Wales	58,340	39,948
Scotland	30,405	4,843
Northern Ireland	5,240	1,256
Irish Free State	26,601	2,972
Isle of Man	221	49
Channel Islands	75	93
	120,882	49,161
EUROPE :		
Gibraltar	2	21
Malta (with Gozo and Comino)	122	231
	124	252
ASIA :		
Indian Empire	1,805,332	318,942
Ceylon	25,332	4,504
Aden and Dependencies	9,000	55
Bahrein Islands	250	100
Straits Settlements	1,600	884
Federated Malay States	27,506	1,325
Other Malay States	22,855	1,162
British Borneo (three jurisdictions) . .	81,106	857
Hong Kong	391	1,076
Cyprus	3,584	311
*Iraq	143,250	2,849
*Palestine	19,000	757
	2,139,206	332,822
AFRICA :		
Union of South Africa	471,917	7,100
Basutoland	11,716	496
Bechuanaland	275,000	153
Swaziland	6,704	113
*South-West Africa	322,768	259
Southern Rhodesia	149,000	996
Northern Rhodesia	287,950	1,270
Nyasaland	37,890	1,307
*Tanganyika Territory	374,000	4,139
Zanzibar	1,020	217

* Administered under Mandate of the League of Nations.

BRITISH EMPIRE

	Area in Sq. Miles.	Pop. in 1,000's.
AFRICA (continued) :		
Kenya	225,000	2,892
Uganda	94,204	3,157
Anglo-Egyptian Sudan	1,008,100	5,484
Somaliland	68,000	345
Gambia	4,130	210
Sierra Leone	31,000	1,541
Gold Coast	80,000	2,300
*Togoland	12,600	188
Nigeria	335,700	19,409
*Cameroons	34,236	687
Mauritius	720	385
Seychelles	156	27
St. Helena and Ascension	81	4
	3,831,892	52,679
AMERICA :		
Canada	3,685,000	9,934
Newfoundland and Labrador	152,734	270
Bermuda	19	31
British Honduras	8,598	45
Bahamas	4,404	59
Barbados	166	168
Jamaica and Dependencies	4,674	954
Trinidad and Tobago	1,976	420
Leeward Islands	715	122
Windward Islands	516	175
British Guiana	89,480	308
Falkland Islands and South Georgia	7,300	4
	3,955,582	12,490
AUSTRALIA, NEW ZEALAND, AND OCEANIA :		
Australian Commonwealth	2,974,581	6,263
Papua and *Territory of New Guinea	166,500	1,023
New Zealand	103,569	1,474
Fiji	7,083	177
Pacific Islands, including *Nauru and *Western Samoa	12,710	312
	3,264,443	9,249
Total	13,312,129	456,653

* Administered under Mandate of the League of Nations.

MISCELLANEOUS FACTS AND FIGURES

THE EARTH

Area, 196,550,000 sq. miles (Land, 55,500,000 sq. miles; Water, 141,050,000 sq. miles).

Population, c. 1,900,000,000.

Diameter at Equator, 7926.7 miles; *Polar Diameter*, 7,900 miles.

Circumference at Equator, 24,902 miles.

Mean distance of Earth from Sun, 92,900,000 miles.

Mean distance of Moon from Earth, 238,840 miles.

LENGTH IN MILES OF A DEGREE OF LATITUDE AND OF LONGITUDE

	At Equator.	At Lat. 15°.	At Lat. 30°.	At Lat. 45°.	At Lat. 60°.	At Lat. 75°.	At Poles.
1° of Latitude .	68.70	68.75	68.88	69.05	69.23	69.36	69.41
1° of Longitude .	69.17	66.83	59.96	49.00	34.67	17.96	0.00

HIGHEST MOUNTAINS

<i>In British Isles</i> . . .	Ben Nevis (4,406 ft.).
<i>In Europe</i> . . .	Mont Blanc (15,782 ft.).
<i>In Asia</i> . . .	Mount Everest (29,140 ft.).
<i>In Africa</i> . . .	Kilimanjaro (19,324 ft.).
<i>In N. America</i> . . .	Mount McKinley (20,464 ft.).
<i>In S. America</i> . . .	Aconcagua (22,868 ft.).
<i>In Australia</i> . . .	Mount Kosciusko (7,336 ft.).

GREATEST OCEAN DEPTHS

<i>Pacific Ocean</i> . . .	Off Mindanao, 35,433 ft.
<i>Atlantic Ocean</i> . . .	Off Porto Rico, 27,972 ft.
<i>Indian Ocean</i> . . .	Off Sunda Islands, 22,968 ft.

LARGEST CITIES IN THE WORLD

1. London	8,202,818	16. Calcutta	1,327,547
2. New York	6,981,927	17. Peking	1,297,718
3. Berlin	4,024,154	18. Sydney	1,238,660
4. Chicago	3,375,329	19. Los Angeles	1,233,561
5. Paris	2,871,429	20. Bombay	1,175,914
6. Shanghai	2,674,447	21. Rio de Janeiro	1,158,000
7. Moscow	2,412,300	22. Warsaw	1,109,478
8. Osaka	2,114,804	23. Montreal	1,098,000
9. Buenos Aires	2,030,700	24. Glasgow	1,088,417
10. Tokyo	1,995,567	25. Hamburg	1,079,126
11. Philadelphia	1,964,430	26. Cairo	1,064,567
12. Vienna	1,857,000	27. Melbourne	1,018,200
13. Leningrad	1,614,008	28. Budapest	1,004,699
14. Detroit	1,573,985	29. Birmingham	1,003,413
15. Tientsin	1,388,747		

LARGEST TOWNS IN THE BRITISH ISLES

ENGLAND AND WALES (Census, 1931)

I. London—		23. Southampton	176,025
Administrative		24. Coventry	167,046
County and City		25. Swansea	164,825
of London	4,396,821	*26. Tottenham	157,748
Outer Ring	3,805,997	27. Birkenhead	147,946
		28. Brighton	147,427
Greater London	8,202,818	*29. East Ham	142,460
2. Birmingham	1,002,413	30. Derby	142,406
3. Liverpool	855,539	31. Rhondda	141,344
4. Manchester	766,333	32. Oldham	140,309
5. Sheffield	511,742	33. Middlesbrough	138,489
6. Leeds	482,789	34. Wolverhampton	133,190
7. Bristol	396,918	*35. Walthamstow	132,965
8. Hull	313,366	*36. Ilford	131,046
9. Bradford	298,041	*37. Leyton	128,317
*10. West Ham	294,086	38. Norwich	126,207
II. Newcastle-upon-		39. Stockport	125,505
Tyne	283,145	40. Blackburn	122,695
12. Stoke-on-Trent	276,619	41. Gateshead	122,379
13. Nottingham	268,801	42. Southend-on-Sea	120,093
14. Portsmouth	249,288	43. Preston	118,830
15. Leicester	239,111	*44. Ealing	117,688
*16. Croydon	233,115	45. Bournemouth	116,780
17. Cardiff	223,648	*46. Hendon	115,682
18. Salford	223,442	47. Huddersfield	113,467
19. Plymouth	208,166	48. South Shields	113,452
20. Sunderland	185,870	49. St. Helens	106,793
*21. Willesden	184,410	50. Walsall	103,102
22. Bolton	177,253	51. Blackpool	101,543

* Part of Greater London.

SCOTLAND (Census, 1931)

1. Glasgow . . .	1,088,417	12. Hamilton . . .	37,863
2. Edinburgh . . .	438,998	13. Ayr . . .	36,784
3. Dundee . . .	175,583	14. Falkirk . . .	36,565
4. Aberdeen . . .	167,259	15. Dunfermline . . .	34,954
5. Paisley . . .	86,441	16. Perth . . .	34,807
6. Greenock . . .	78,948	17. Airdrie . . .	25,954
7. Motherwell and Wishaw . . .	64,708	18. Rutherglen . . .	25,157
8. Clydebank . . .	46,963	19. Dumfries . . .	22,795
9. Kirkcaldy . . .	43,874	20. Stirling . . .	22,593
10. Coatbridge . . .	43,056	21. Inverness . . .	22,582
11. Kilmarnock . . .	38,099	22. Dumbarton . . .	21,546

NORTHERN IRELAND (Census, 1926)

1. Belfast . . .	415,151	6. Newry . . .	12,226
2. Londonderry . . .	45,159	7. Portadown . . .	11,991
3. Bangor . . .	13,311	8. Ballymena . . .	11,873
4. Lurgan . . .	12,500	9. Newtownards . . .	10,149
5. Lisburn . . .	12,406		

IRISH FREE STATE (Census, 1926)

1. Dublin— County Borough . . .	316,693	6. Waterford . . .	26,647
Four adjoining Urban Districts . . .	102,288	*7. Kingstown (Dun Laoghaire) . . .	18,987
	418,981	8. Galway . . .	14,227
2. Cork . . .	78,490	9. Dundalk . . .	13,996
*3. Rathmines and Rathgar . . .	39,984	10. Drogheda . . .	12,716
4. Limerick . . .	39,448	11. Wexford . . .	11,879
*5. Pembroke . . .	33,383	12. Sligo . . .	11,437
		13. Tralee . . .	10,533
		14. Kilkenny . . .	10,046

* Urban District adjoining Dublin.

FOREIGN AND COLONIAL MONEY

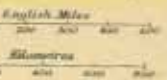
Countries.	Chief Coins.	Approximate value in British money.
Argentina. . . .	Peso (paper) = 100 centavos . . .	s. d. 1 8
	" (gold) = " " " " . . .	4 0
Austria	Schilling = 100 groschen . . .	0 7
Belgium	Franc = 100 centimes . . .	0 1½
	Belga = 5 francs . . .	0 7
Brazil	Cruzeiro = 4 milreis . . .	2 0
	Milreis (paper) = 1,000 reis . . .	0 6
B. Honduras . . .	Dollar (gold) = 100 cents . . .	4 1
Bulgaria	Lev = 100 stotinki . . .	0 0½
Canada	Dollar (gold) = 100 cents . . .	4 1
Ceylon. . . .	Rupee = 16 annas . . .	1 6
Chile	Peso (gold) = 100 centavos . . .	0 6
China	Tael (dollar) = 100 coppers . . .	2 8
Cuba	Peso (gold) = 1 dollar (U.S.A.) . . .	4 1
Czechoslovakia . .	Krone	0 1½
Denmark	Krone = 100 öre . . .	1 1½
Egypt	Egyptian £ = 100 piastres . . .	20 6½
Finland	Markka = 100 penni . . .	0 1½
France	Franc = 100 centimes . . .	0 2
Germany	Reichsmark = 100 pfennige . . .	0 11½
Greece	Drachma = 100 lepta . . .	0 0½
Holland	Florin or Gulden = 100 cents . . .	1 8
Hungary	Pengo = 100 filler . . .	0 8½
India	Rupee = 16 annas . . .	1 6
Italy	Lira = 100 centesimi . . .	0 2½
Japan	Yen = 100 sen . . .	2 0½
Mauritius	Rupee = 16 annas . . .	1 6
Mexico	Dollar (gold) = 100 centavos . . .	2 0½
	Peso (gold) = 50 cents (U.S.A.) . . .	2 0½
Newfoundland . .	Dollar (gold) = 100 cents . . .	4 1
Norway	Krone = 100 öre . . .	1 1½
Peru	Libra = 10 soles . . .	20 0
Portugal	Escudo (gold) = 100 centavos . . .	4 5½
Romania	Leu = franc = 100 bani . . .	0 0½
Russia. . . .	Rouble = 100 copecks . . .	3 1½
Spain	Peseta = franc = 100 centimes . . .	0 9½
Straits Settlements	Dollar (silver)	2 4
Sweden	Krona = 100 öre . . .	1 1½
Switzerland . . .	Franc = 100 centimes . . .	0 9½
Turkey	Lira = 100 piastres . . .	18 0
United States . .	Dollar (gold) = 100 cents . . .	4 1
Uruguay	Peso (gold) = 100 centimes . . .	4 3
Yugoslavia . . .	Dinar = 100 paras . . .	0 9½

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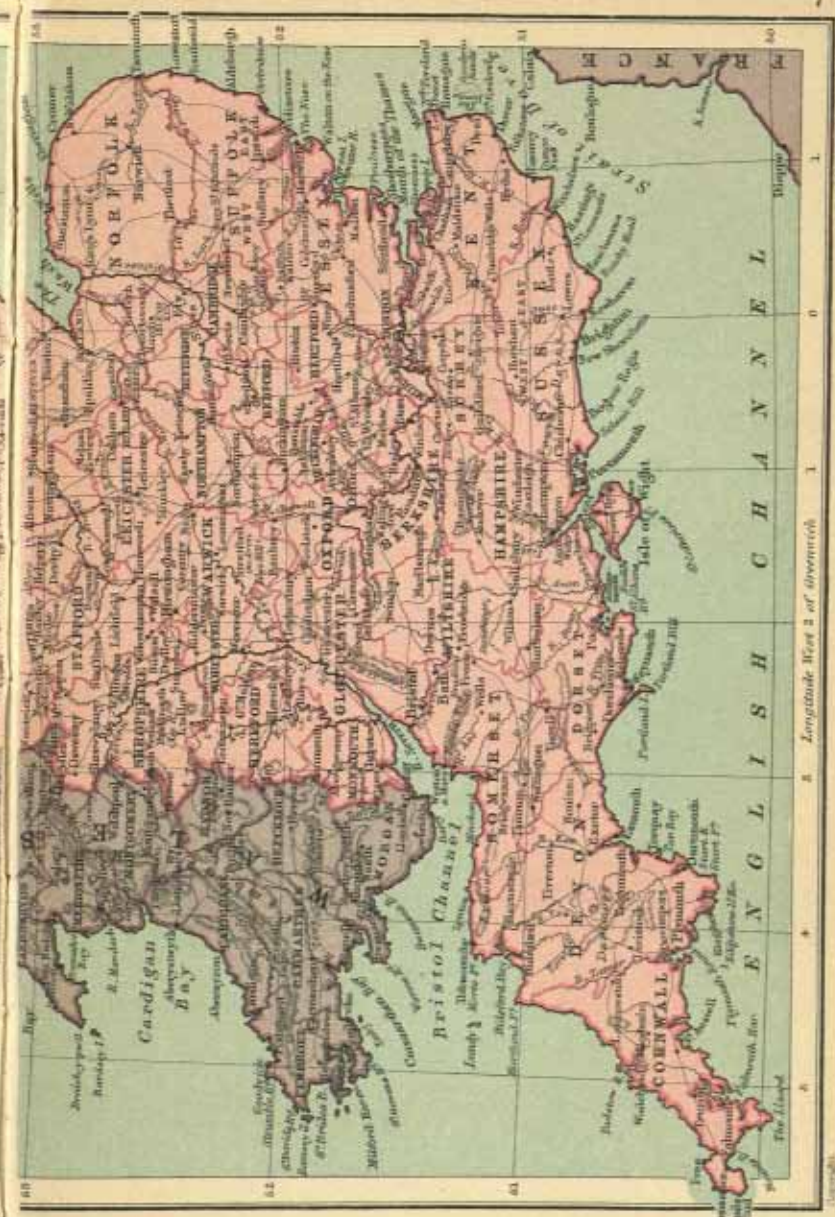
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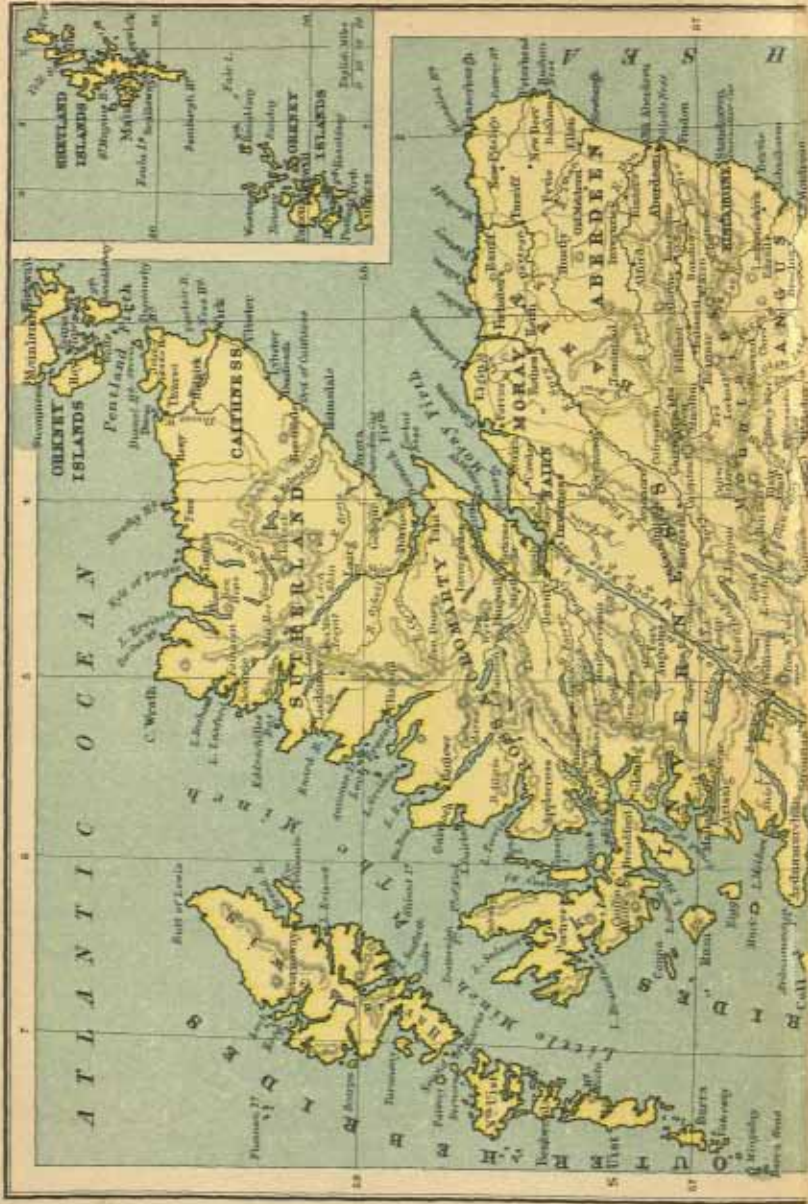
ENGLAND AND WALES



Longitude West 2 of Greenwich

Map of England and Wales

SCOTLAND



IRELAND



Longitude West of Greenwich





Longitude West 2 of Greenwich



Longitude East 6 of Greenwich

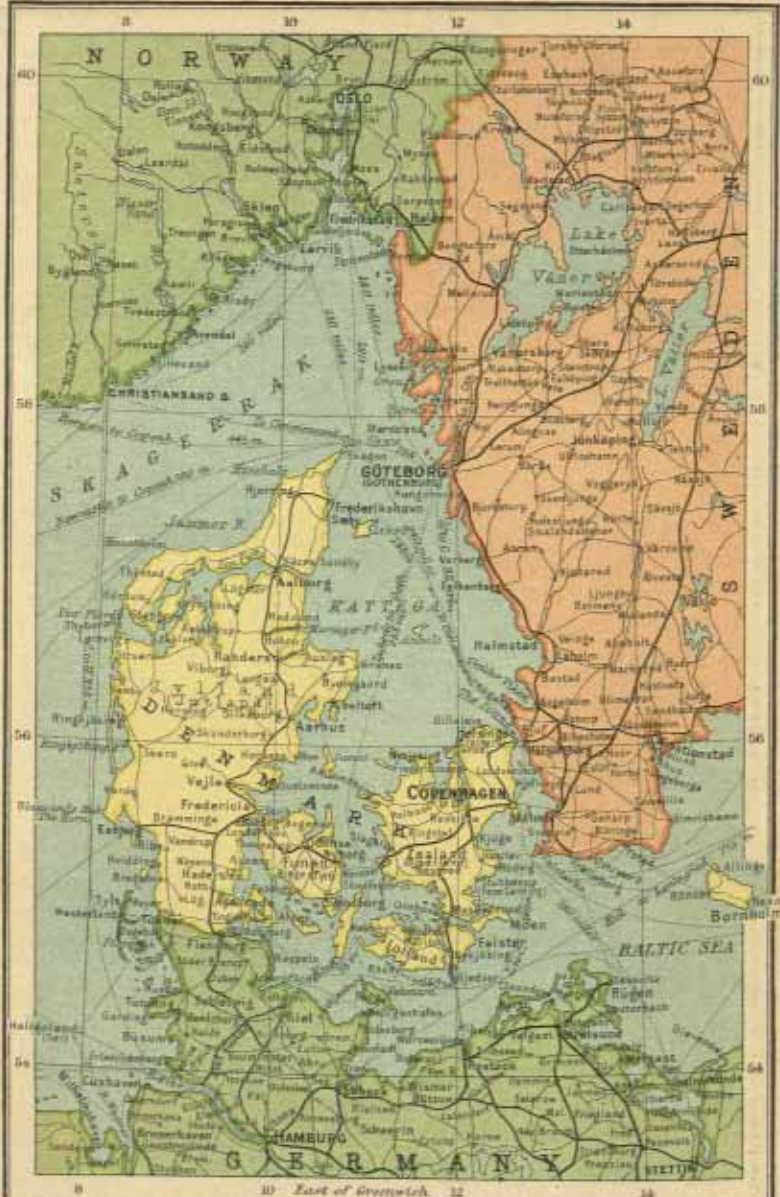
SWITZERLAND

Franklin Miller

Chlorine









English Miles

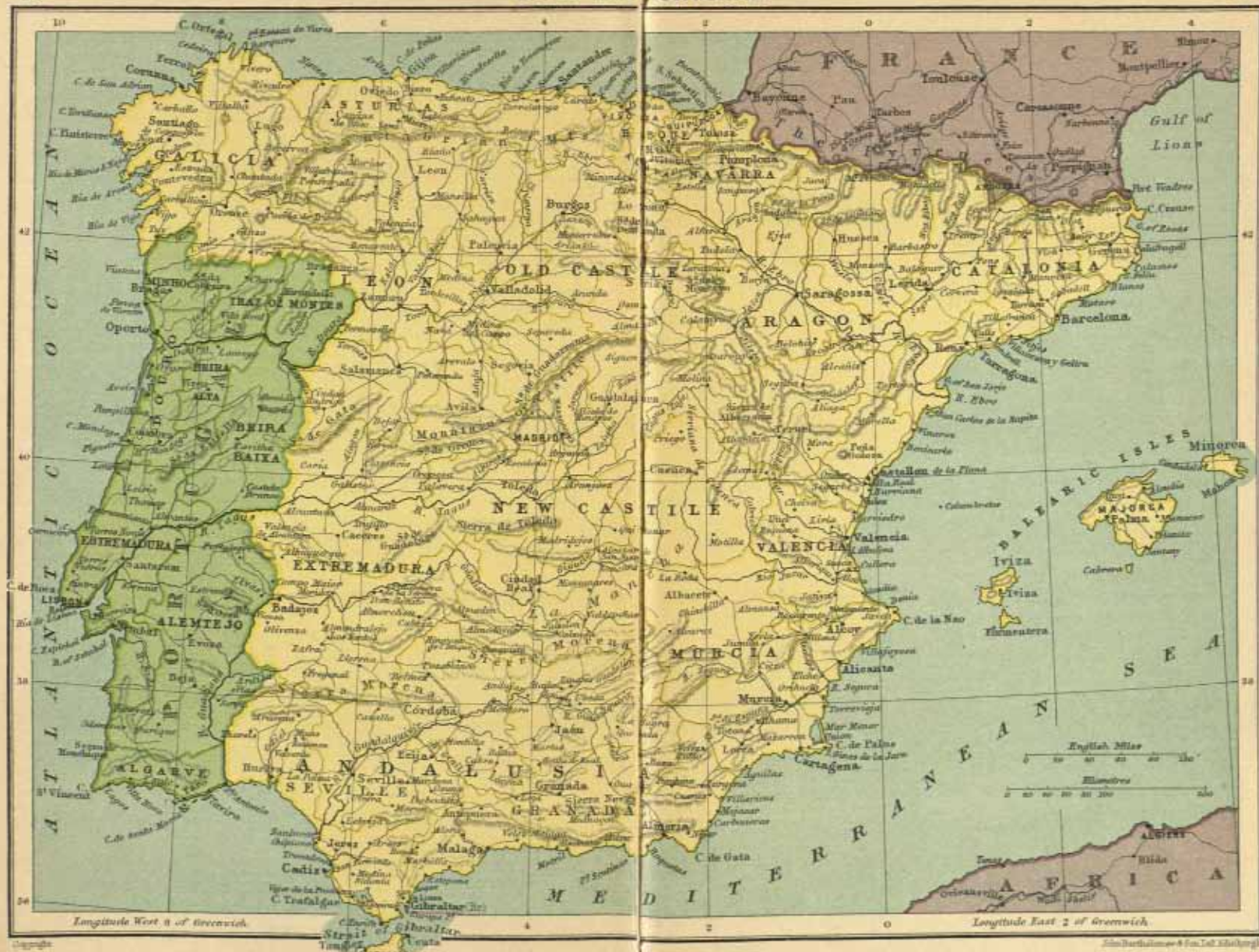
Kilometres

John Bartholomew & Son Ltd Edinburgh



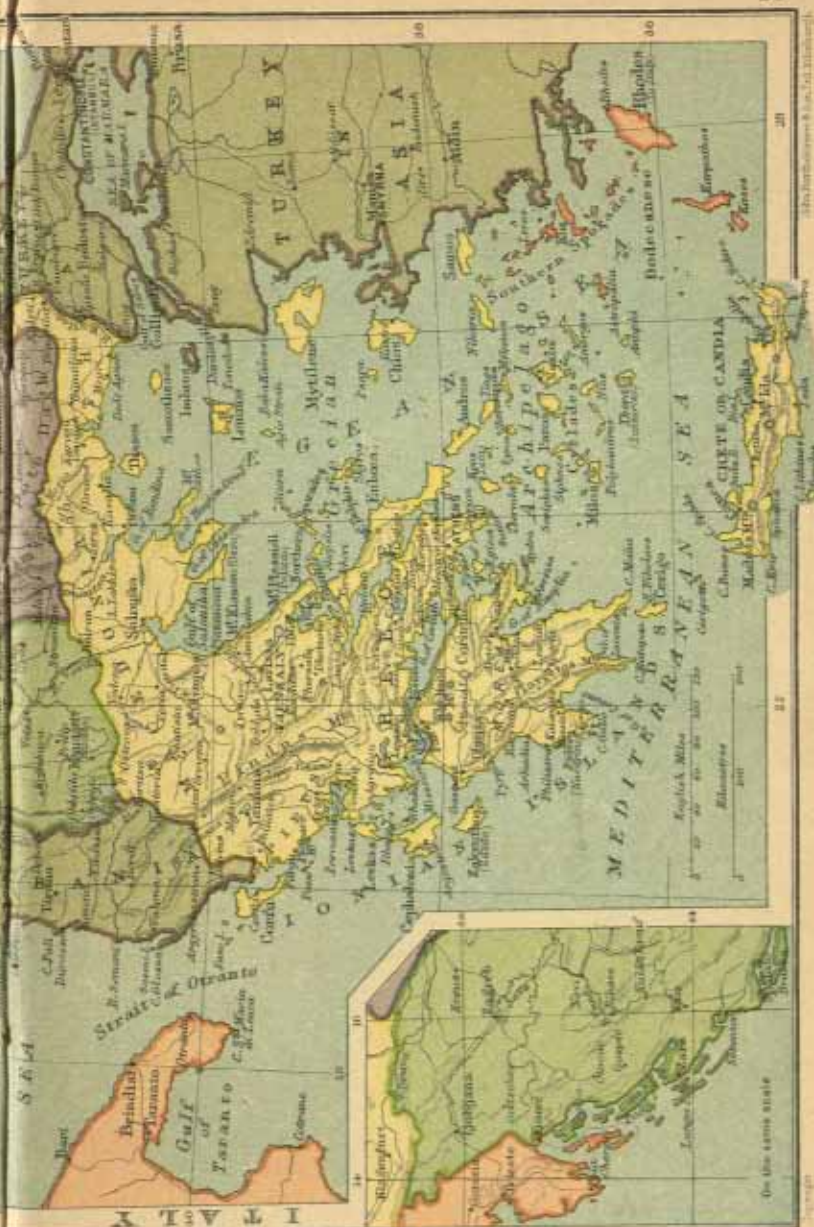
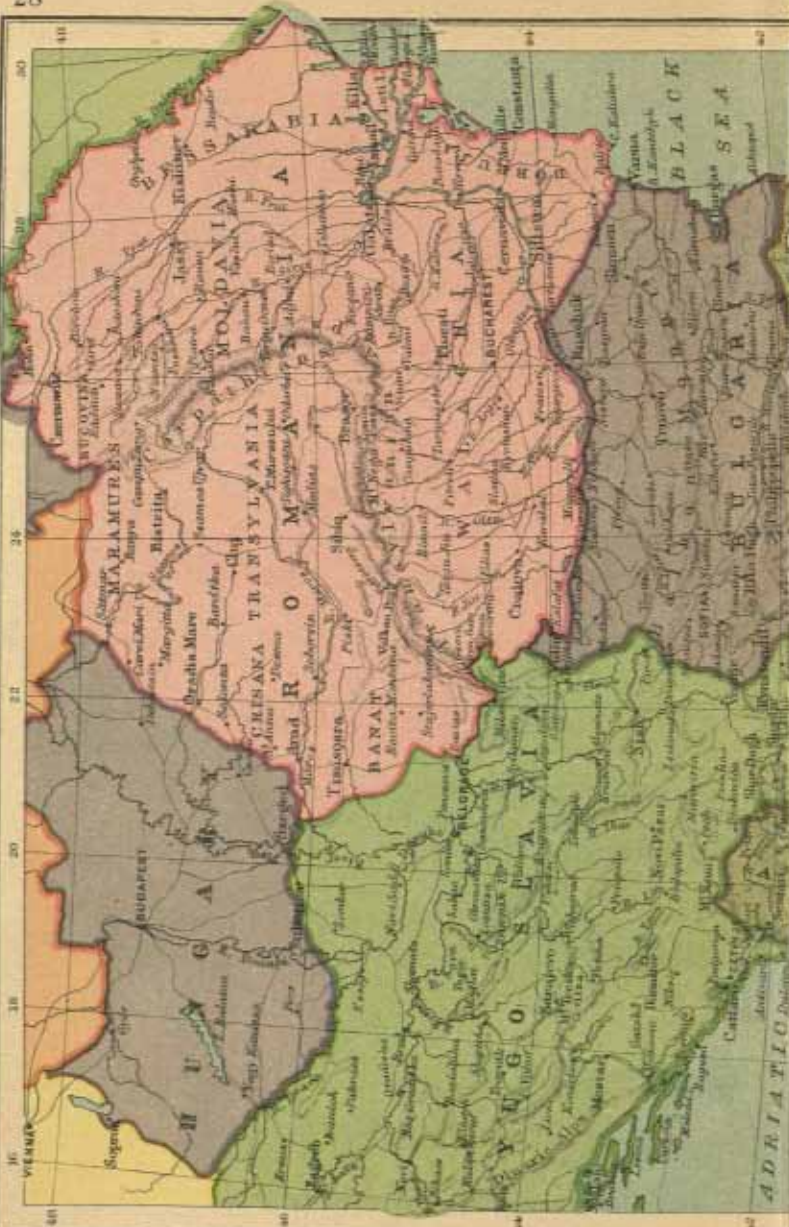






BALKAN STATES

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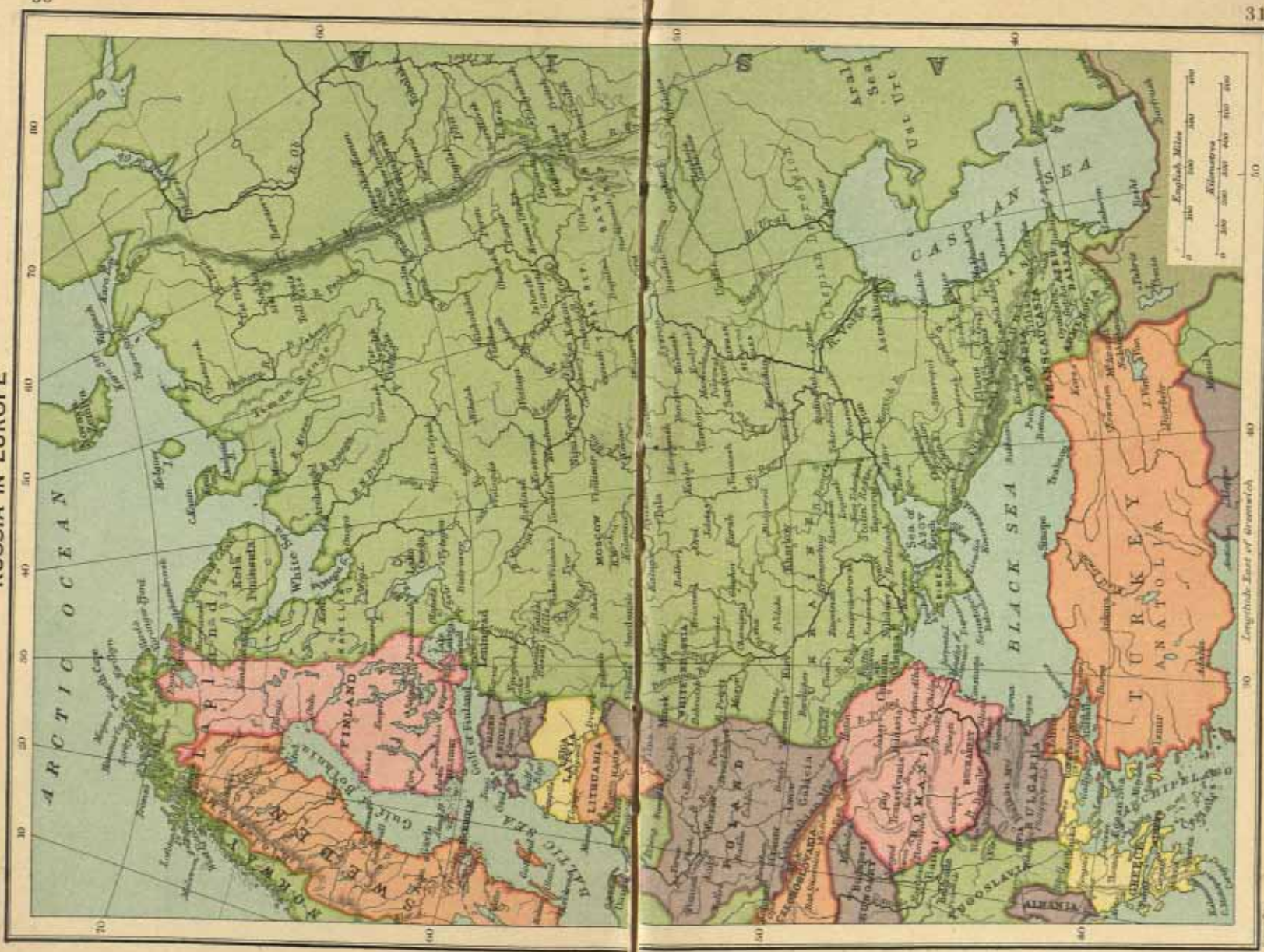


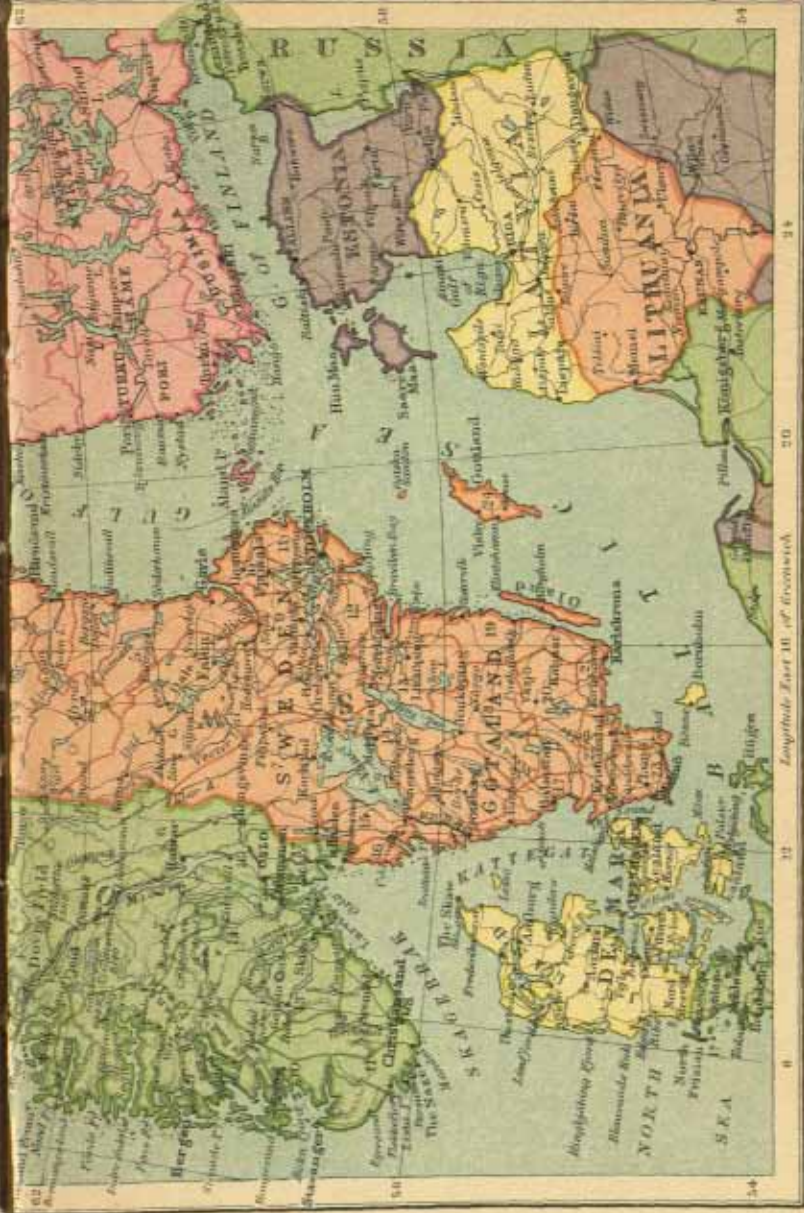
On the same scale

Scale

Scale

RUSSIA IN EUROPE



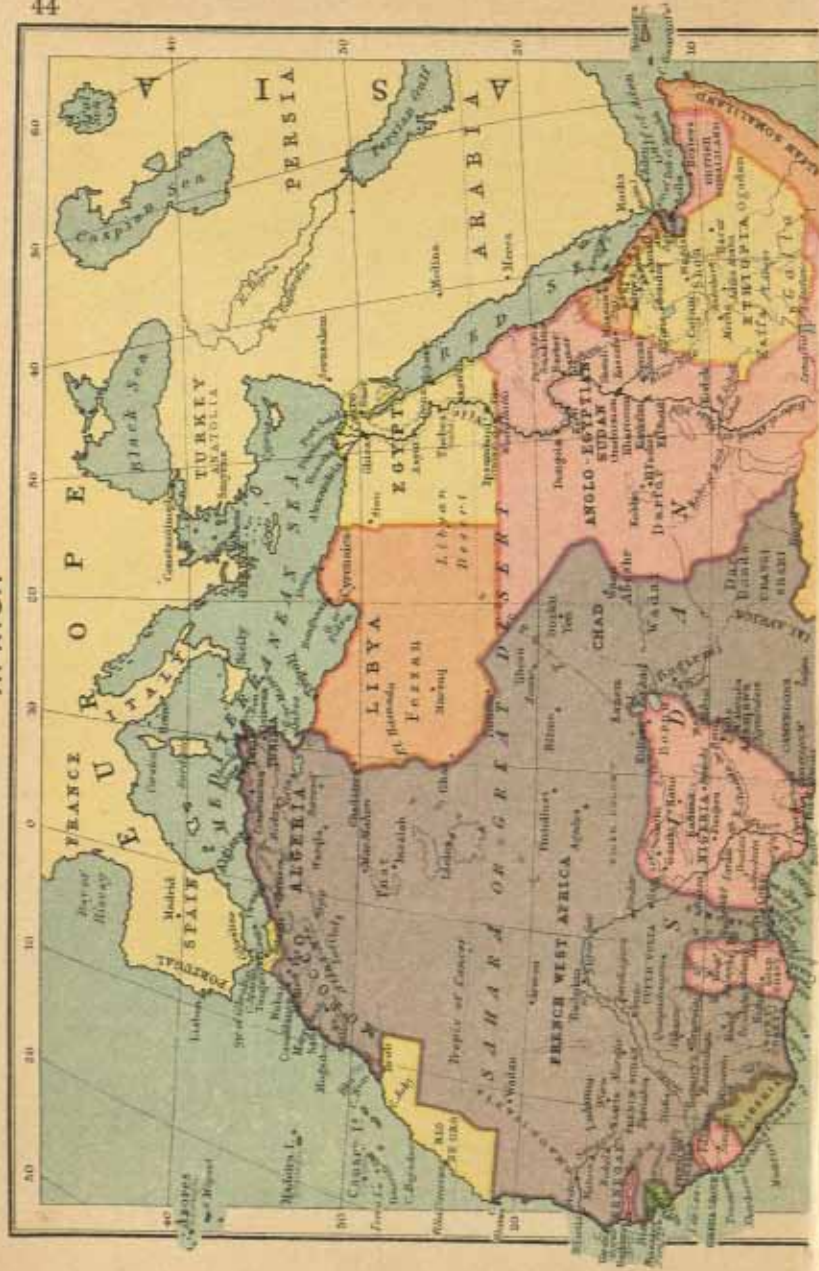




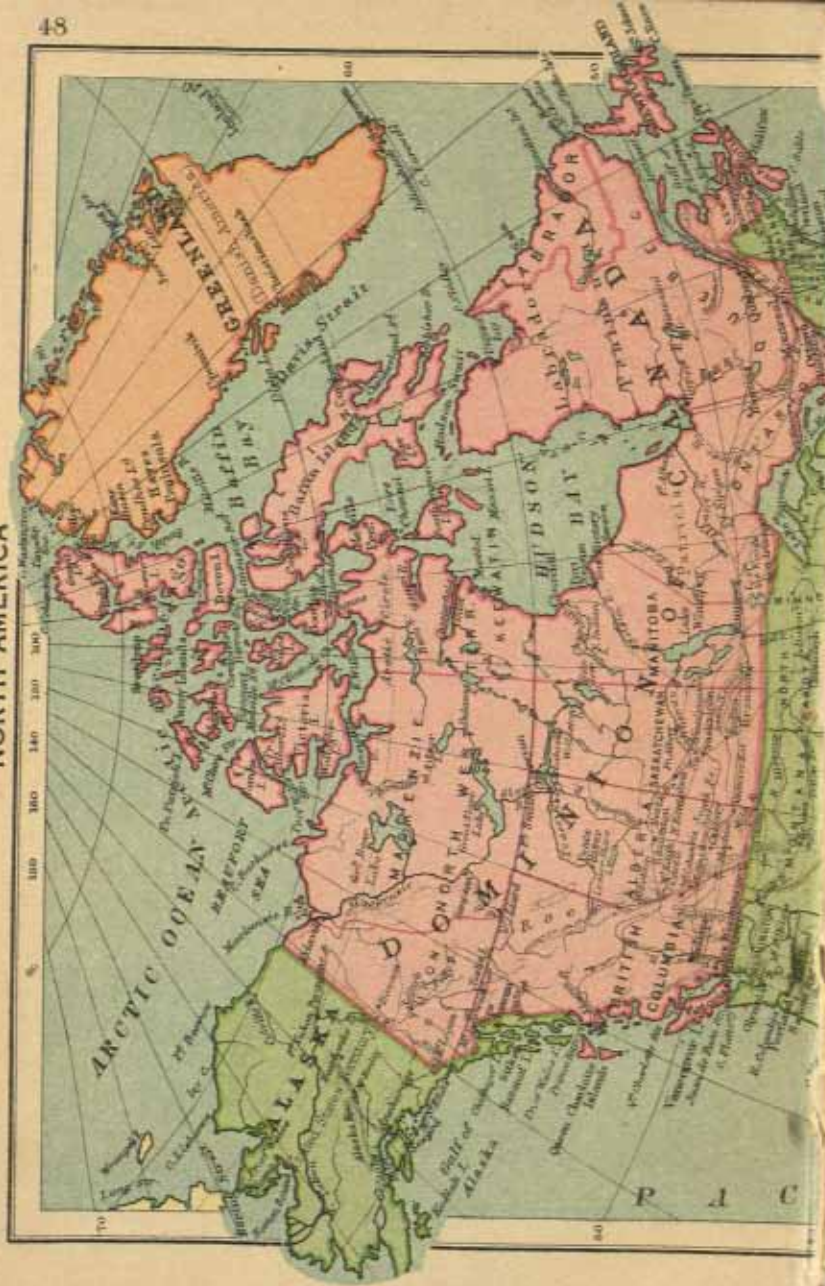




AFRICA



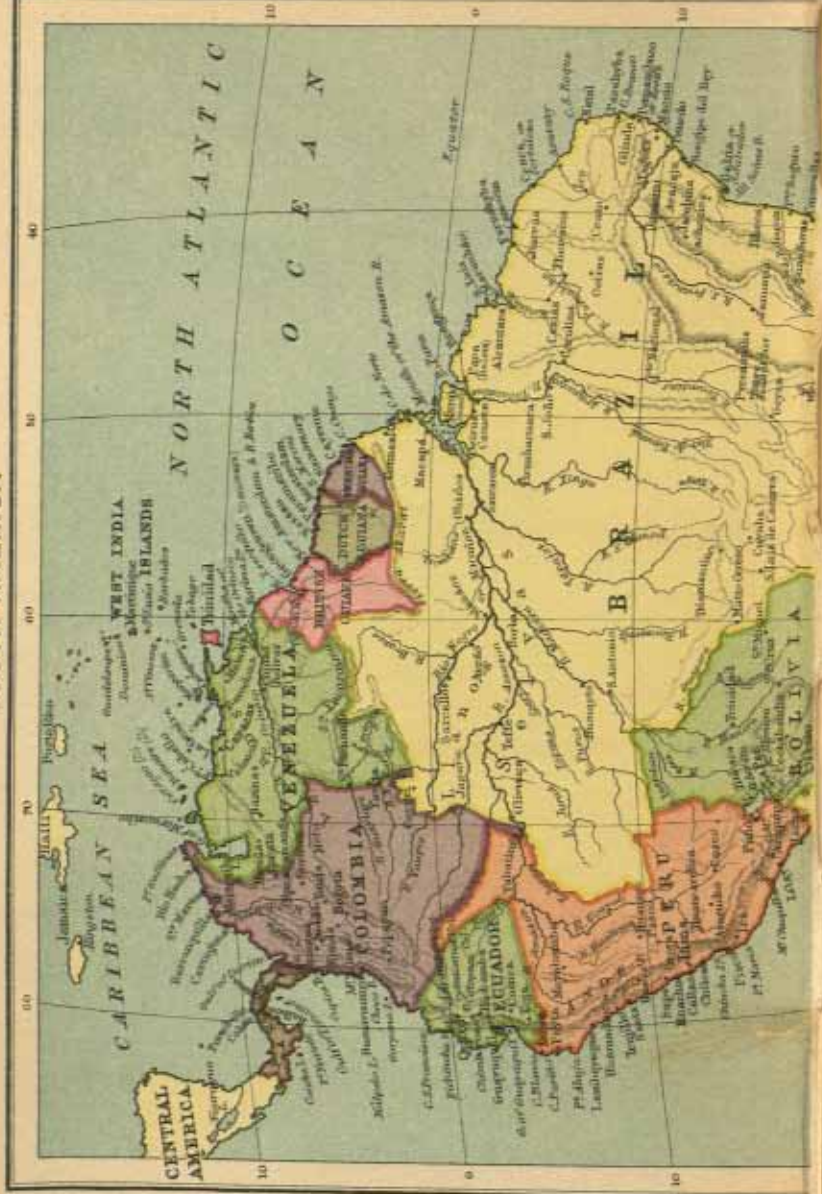














NEW ZEALAND



- | Redesign in Country | | Year |
|---------------------|-----------------|------|
| 1 | Malaysia | 1972 |
| 2 | Guatemala | 1973 |
| 3 | Thailand | 1973 |
| 4 | Philippines | 1973 |
| 5 | Indonesia | 1973 |
| 6 | Italy | 1973 |
| 7 | Spain | 1973 |
| 8 | France | 1973 |
| 9 | Germany | 1973 |
| 10 | Sweden | 1973 |
| 11 | Denmark | 1973 |
| 12 | Netherlands | 1973 |
| 13 | Belgium | 1973 |
| 14 | Portugal | 1973 |
| 15 | Switzerland | 1973 |
| 16 | Austria | 1973 |
| 17 | Finland | 1973 |
| 18 | Japan | 1973 |
| 19 | South Korea | 1973 |
| 20 | Taiwan | 1973 |
| 21 | Hong Kong | 1973 |
| 22 | Singapore | 1973 |
| 23 | Brunei | 1973 |
| 24 | Maldives | 1973 |
| 25 | Bhutan | 1973 |
| 26 | Nepal | 1973 |
| 27 | Bangladesh | 1973 |
| 28 | Pakistan | 1973 |
| 29 | India | 1973 |
| 30 | Sri Lanka | 1973 |
| 31 | Myanmar | 1973 |
| 32 | Thailand | 1973 |
| 33 | Laos | 1973 |
| 34 | Cambodia | 1973 |
| 35 | Vietnam | 1973 |
| 36 | North Vietnam | 1973 |
| 37 | South Vietnam | 1973 |
| 38 | China | 1973 |
| 39 | Taiwan | 1973 |
| 40 | Hong Kong | 1973 |
| 41 | Macau | 1973 |
| 42 | Moldova | 1973 |
| 43 | Ukraine | 1973 |
| 44 | Belarus | 1973 |
| 45 | Lithuania | 1973 |
| 46 | Latvia | 1973 |
| 47 | Estonia | 1973 |
| 48 | Poland | 1973 |
| 49 | Czech Republic | 1973 |
| 50 | Slovak Republic | 1973 |
| 51 | Hungary | 1973 |
| 52 | Romania | 1973 |
| 53 | Bulgaria | 1973 |
| 54 | Greece | 1973 |
| 55 | Turkey | 1973 |
| 56 | Cyprus | 1973 |
| 57 | Malta | 1973 |
| 58 | San Marino | 1973 |
| 59 | Vatican City | 1973 |
| 60 | Monaco | 1973 |
| 61 | Liechtenstein | 1973 |
| 62 | Andorra | 1973 |
| 63 | San Marino | 1973 |
| 64 | Vatican City | 1973 |
| 65 | Monaco | 1973 |
| 66 | Liechtenstein | 1973 |
| 67 | Andorra | 1973 |
| 68 | San Marino | 1973 |
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| 91 | Liechtenstein | 1973 |
| 92 | Andorra | 1973 |
| 93 | San Marino | 1973 |
| 94 | Vatican City | 1973 |
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| 96 | Liechtenstein | 1973 |
| 97 | Andorra | 1973 |
| 98 | San Marino | 1973 |
| 99 | Vatican City | 1973 |
| 100 | Monaco | 1973 |



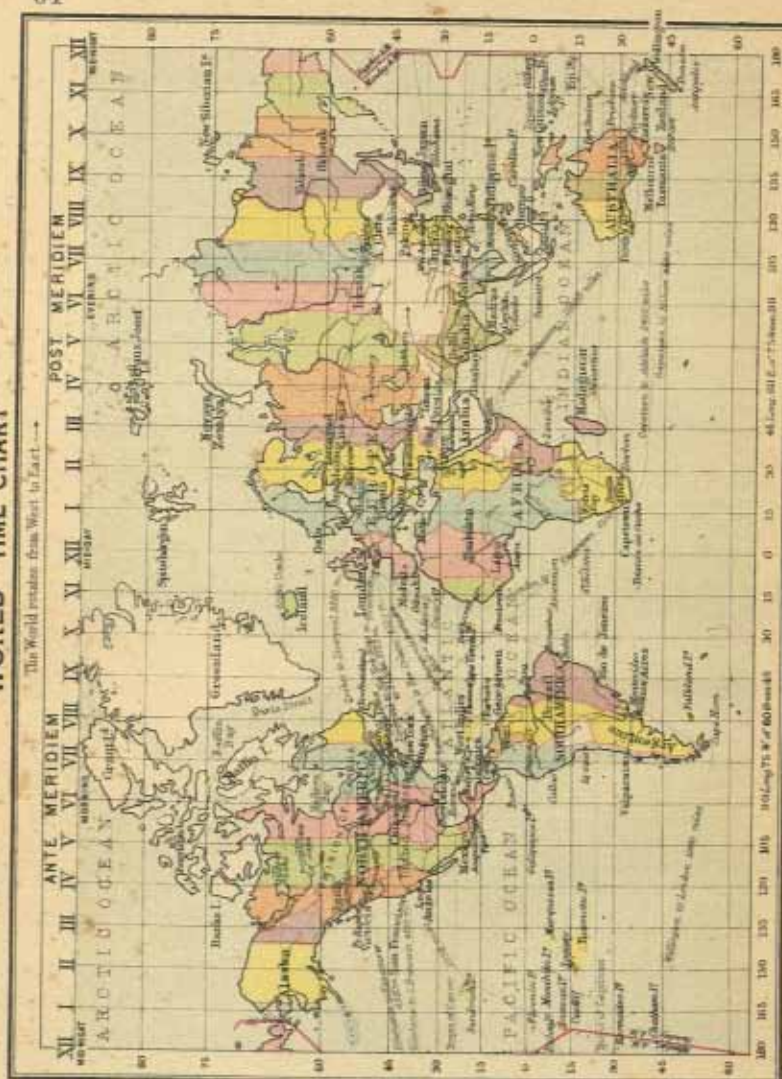
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| 128 | Spain | 158 |
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| 131 | Ireland | 161 |
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| 135 | Germany | 165 |
| 136 | Austria | 166 |
| 137 | Switzerland | |

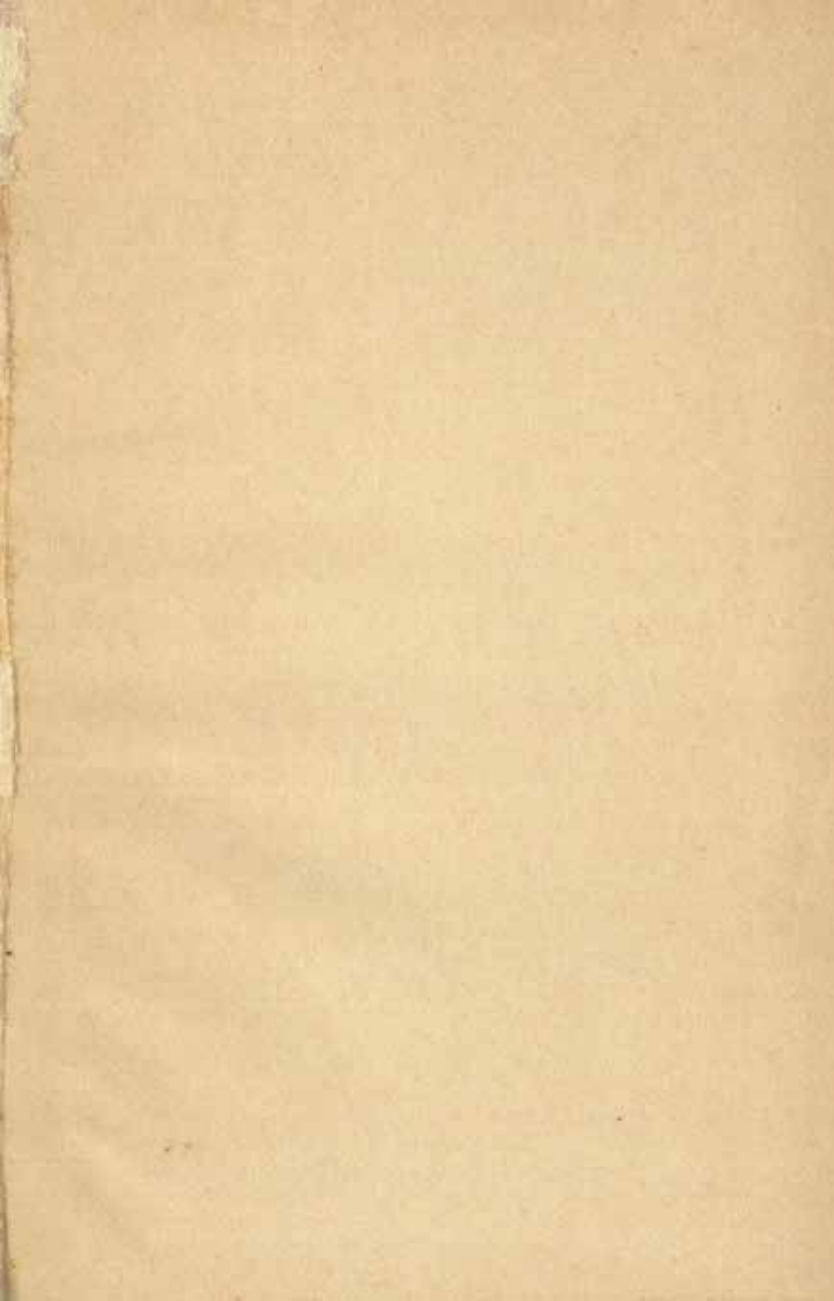
In the vicinity of Christchurch
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a Benthodon f. M. Herbert & Jennings



WORLD—TIME CHART

The World rotates from West to East →





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